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CONTENTS

General (including Statistics)	1836-1857
Nervous System	1858-1860
Receptive and Perceptual Processes	1861-1904
Learning, Conditioning, Intelligence (including Attention, Thought)	1905-1907
Motor and Glandular Responses (including Emotion, Sleep)	1908-1929
Psychoanalysis, Dreams, Hypnosis	1930-1935
Functional Disorders	1936-1965
Personality and Character	1966-1986
General Social Processes (including Aesthetics)	1987-2010
Crime and Delinquency	2011-2019
Industrial and Personnel Problems	2020-2047
Educational Psychology (including Vocational Guidance)	2048-2064
Mental Tests	2065-2068
Childhood and Adolescence	2069-2079

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AUTHOR INDEX

- Allan, W., 1936
Allport, F. H., 1967
Anderson, C., 1937
[Anon.], 1836, 1837,
1861, 1863
Ansbacher, H. L., 1863
Asha, W. P., 1921
Atkinson, M., 1938
Aubry, M., 1864
Babcock, L., 2020
Bacon, S. D., 1988
Bagans, C. N., 2021
Bailinsky, B., 1966
Barnes, T. C., 1858
Barron, D. H., 1908
Baruch, D. W., 2069
Batchelor, I. R. C.,
1946
Beebe-Center, J. G.,
1865
Benda, C. E., 1939,
1940
Bendit, L. J., 1930
Benjamin, K., 1838
Benton, A. L., 1966
Berman, R. E., 1993
Bernyer, G., 1866
Bertocci, P. A., 1967
Beutner, R., 1858
Beyne, —, 1867
Billingsley, F. Y., 1979
Binder, H., 1969
Binswanger, W., 1970
Bitterman, M. E., 1931
Bogoslovsky, A. I.,
1868, 1909
Bonnardel, R., 2022
Bramley, J. F., 2023
Brandis, S. A., 1869,
1870, 1871
Britt, S. H., 2050
Brown, J. M., 2031
Brosek, J., 1839
Brueckner, L. J., 1989
Brues, C. T., 1872
Bryan, A. L., 1840
Burian, H. M., 1901
Burkart, K. H., 2048
Burt, C., 2049
Campbell, P. A., 1873
Carmichael, L., 1865
Carroll, J. B., 1841
Case, T. J., 1920
Cattell, R. B., 1971
Chase, V. E., 2066
Clarke, H. H., 1910
Cory, H. A., 2024
Craig, R. N., 2070
Crespi, L. P., 1990,
1991, 1992
Cuthbert, N. L., 1911
Davis, D. B., 1993
Davis, F. B., 1842
Davis, H., 1885
Denslow, J. S., 1911
Deterling, R. A., Jr.,
1843
Dudley, F. C., 1936
Durup, G., 1866
Edgerton, H. A., 2050
Elvehjem, C. A., 1963
Escalona, S. K., 2065
Easer, H. E., 1843
Ewalt, J. K., 1941
Eysenck, H. J., 1994
Farmer, E., 2025
Feibleman, J. K., 1995
Ferguson, G. A., 1844
Finesinger, J. E., 1942
Fite, H. H., 2026
Flack, W. S., 2051
Flanders, S. E., 1912
Foulkes, S. H., 1932
Fowler, E. P., 1874,
1875
Frederburgh, F. A.,
2017
Freeman, E., 2028
Freeman, F., 2056
Gambaro, P. K., 1996
Gaul, A. T., 1997
Gesell, A., 2071
Ghoosh, R., 2072
Giraud, J. C., 1864
Goldman, J. L., 1876
Good, C. V., 2052
Gordon, A. M., 1877
Gordon, B., 1878
Granit, R., 1879
Gray, W. S., 2053
Greene, R. A., 1943
Greenwood, E., 1845
Grossman, F. M., 1880
Guilder, R. P., 2073
Gutiérrez-Noriega, C.,
1913
Halstead, H., 2066
Harrison, R., 1972
Hart, O. M., 2054
Hauptmann, A., 1944
Hawkins, J. E., Jr.,
1883
Henry, C. E., 2074
Herndon, C. N., 1936
Herskovita, M. J., 1998
Hildreth, H. M., 1945
Hill, J. M., 1945
Hoffman, J., 1881
Holmes, S. J., 1973
Holzinger, K. J., 1846
Hubbell, H. G., 2029
Hughes, M., 2075
Hughson, W., 2076
Hull, A. W., 2030
Hull, C. L., 1999
Humphrey, B. M., 1933
Humphrey, G., 1881
Hunt, J. McV., 1847
Hunt, W. H., 1882
Hunter, W. S., 1847
Hyde, R. M., 2033
Ironside, R., 1946
Irving, J. A., 1848
Johannesson, A., 2000
Judson, H. H., 2031
Kaplan, O. J., 2001
Karnosh, L. J., 2078
Keoppel, F., 2055
Kerr, D. J. A., 2032
Kerschbaumer, L., 2011
Keya, A., 1839
Keyt, N. L., 1952
Kimble, G. A., 1974
Kingsley, L. V., 2033
Klee, J. B., 1905
Knower, F. H., 2055
Kraimes, S. H., 2034
Krapf, E. E., 1947
Kravkov, S. V., 1883
Kreinbender, W. R.,
2002
Kuhn, R., 1975
Kupalov, P. S., 1859
Larsell, J. F., 1884
Larsell, O., 1884
Layard, J., 1976
Leathers, Lord, 2035
Lecomte du Nolly, P.,
1914
Lederer, F. L., 1878
Lee, O., 1849
Leinfelder, P. J., 1852
Lepkin, M., 1987
Lewinson, T. S., 1978
Lewis, E., 1932
Lindsay, J. R., 1915
Lombard, G. F. F.,
2036
Lundholm, H., 1934
Lurie, M. H., 1885
McConnell, T. R., 2056
McCady, E., 1884
McCullagh, E. P., 2078
McDonald, J. B., 1923
McHugh, G., 2077
McNally, W. J., 1886
McNamara, W. J., 2057
Madigan, L. F., 1889
Maier, N. R. F., 1905
Malloy, C. T., 1880
Malone, P. W., 1887
Marcuse, F. L., 1931,
2003
Mather, K., 1863
Matthews, B. H. C.,
1916
Mayo, E., 2036
Mead, L. C., 1865
Mearin, R. J., 2021
Meigs, J. V., 1942
Menninger, K., 1948
Mercier, L. J. A., 1850
Meyer, A., 1949
Meyer, B. J., 1917
Meyer, R. K., 1917
Miller, E., 2012, 2013
Miller, R. B., 1950
Mohr, P., 1977
Molholm, H. B., 1951
Moloney, J. C., 2014
Money-Kyrle, R. E.,
1935
Moreno, J. L., 2004,
2015
Morgan, R. H., 1915
Morlan, G. K., 1918
Moure, J. P., 1888
Mower, O. H., 1906
Munroe, R., 1978
Obermann, C. E., 2037
Ogle, K. N., 1889
Ordahl, G., 1952
Overholser, W., 2016
Page, J. D., 2038
Parsons, C. T., 1919
Pearce, J. D. W., 2017
Peddle, W., 1890
Penrose, L. S., 2067
Perlman, H. B., 1920
Phillips, D., 2055
Pieron, H., 1866, 1891
Pinson, A., 2038
Pratt, D., 1953
Prescott, D., 2056
Radzinowicz, L., 2018
Rapaport, D., 2065
Rashkis, H. A., 2005
Raven, J. C., 2059
Rees, J. R., 1954
Reiner, J. M., 1896
Richardson, C. H., 1851
Richna, L. A., 1921
Rigerson, D. G., 2039
Riker, B. L., 2006
Ring, J. R., 1922
Robbie, W. A., 1852
Roberts, D. R., 1955
Robinson, M. F., 1956
Rorachach, O., 1853
Rosanoff, W. R., 1958
Roth, G. M., 1923
Rotter, J. B., 1972
Rudolf, G. de M., 2019
Sargent, H., 1854
Scala, N. P., 1927
Schall, L. A., 2073
Schenck, H. P., 1894
Schloerb, L. J., 2060
Schlossberg, H., 1847
Schmidt, C. F., 1924
Schmidt, H. O., 1979
Schneider, W. F., 2078
Schneirla, T. C., 1925
Schoonover, F. S., Jr.,
2040
Schrader, P. J., 1956
Schumacher, H., 2078
Seipt, I. S., 2078
Senturia, B. H., 1892
Sewny, V. D., 2007
Sheard, C., 1923
Sheps, J. G., 2041
Sherman, H., 1893
Shryock, R. H., 1937
Silcox, L. E., 1894
Silverman, D., 1958
Sloan, L. L., 1895
Slcombe, C. S., 2042
Smith, M., 2008
Solandt, D. Y., 1926
Spiegel, E. A., 1927
Spiegelman, S., 1896
Standley, H. G., 2043
Stengel, E., 1959
Strang, R., 2061
Stroheck, L. J., 1897
Sulkowitch, H. W.,
1942
Sutherland, R. L., 1960
Svaetichin, G., 1879
Tavares Bastos, A.,
1961
Taylor, H. M., 1898
Taylor, W. S., 2009
Teicher, J. D., 1962
Thompson, E., 2076
Thompson, G. N., 1907
Thorndike, E. L., 1928
Thurstone, L. L., 2068
Tolman, E. C., 1835
Torkelson, E. H., 1955
Truex, E. H., 1878
Tschudin, A., 1980
Turk, S. E., 2044
Turner, G. H., 1856
Turner, J. W. C., 2018
Ullman, A. D., 1906
Ullman, E. V., 1899
[Various], 1900
Visser, S. S., 1857
Waehner, T. S., 1978
Wagner, J. R., 1963
Wald, G., 1901
Wall, W. D., 2045
Wallen, R., 1929
Wallin, J. E. W., 2062
Walshaw, J. B., 2059
Waters, E. N., 2010
Watson, L. A., 1902
Webbink, P., 2046
Weber, A., 1981
Weitzman, E., 2057
Wekstein, L., 1982
Wepman, J. M., 1915
Werner, H., 1983
Wightwick, M. I., 2063
Will, O. A., Jr., 1860,
2047
Wilson, W. H., 1903
Wolberg, L. R., 1964
Wolfe, J. M., 1984
Wolff, C., 1965
Wolman, H. M., 1993
Woods, W. A., 2021
Wright, C., 1952
Wright, J. E., 1993
Wyckoff, C. W., 2078
Yahn, M., 1985
Yoakam, G. A., 2064
Young, R. W., 1904
Zbrank, L. J., 2038
Zeligs, R., 2079
Zolliker, A., 1986
Zucker, E. M., 2078

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GENERAL

(incl. Statistics)

1836. [Anon.] Carl R. Rogers. *J. consult. Psychol.*, 1945, 9, facing p. 1.—Portrait.—S. G. Dulsky (Rochester, N. Y.).

1837. [Anon.] Carl Emil Seashore. *J. Speech Disorders*, 1945, 10, 1-2.—Seashore's contributions to the field of speech correction are reviewed. Portrait.—F. W. Finger (Virginia).

1838. Benjamin, K. An I.B.M. technique for the computation of ΣX^2 and ΣXY . *Psychometrika*, 1945, 10, 61-67.—Given I.B.M. cards punched with scores (or any numbers)—but not their squares—a method is presented of tabulating them (on the No. 405 alphameric I.B.M. tabulator) so as to obtain the sum of squares. The technique is also adaptable to summation of cross-products. The principle is an extension of the Mendenhall-Warren-Hollerith technique of vertical progressive digitizing, without the necessity of manual addition or summary-punching, and is designed for machines not equipped with the "card cycle total transfer" device or "progressive total" device. Use is made of "counter rolling." Efficient use of machine capacity is made only when intercorrelations between no more than two variables are required in addition to sums of squares. A résumé of some techniques commonly employed is included.—(Courtesy *Psychometrika*).

1839. Brozek, J., & Keys, A. General aspects of interdisciplinary research in experimental human biology. *Science*, 1944, 100, 507-512.—Problems which are common to a number of different fields of science are being attacked more and more by the interdisciplinary approach, a method of attack wherein workers representing several scientific fields co-operate. The personnel requirements of such a program and the problems to be solved in the training of students for the successful carrying out of interdisciplinary research are discussed.—F. A. Mote (Connecticut).

1840. Bryan, A. I. Summarized proceedings and reports of the eighth annual meeting of the American Association for Applied Psychology. *J. consult. Psychol.*, 1945, 9, 8-34.—S. G. Dulsky (Rochester, N. Y.).

1841. Carroll, J. B. The effect of difficulty and chance success on correlations between items or between tests. *Psychometrika*, 1945, 10, 1-19.—A study is made of the extent to which correlations between items and between tests are affected by the difficulties of the items involved and by chance success through guessing. The Pearsonian product-moment coefficient does not necessarily give a correct indication of the relation between items or sets of items, since it tends to decrease as the items or tests become less similar in difficulty. It is suggested that the tetrachoric correlation coefficient can properly

be used for estimating the correlation between the continua underlying items or sets of items even though they differ in difficulty, and a method for correcting a 2×2 table for the effect of chance is proposed.—(Courtesy *Psychometrika*).

1842. Davis, F. B. The reliability of component scores. *Psychometrika*, 1945, 10, 57-60.—A method is given for determining the reliability of each of the components resulting from a factor analysis by the principal axis method.—(Courtesy *Psychometrika*).

1843. Deterling, R. A. Jr., & Essex, H. E. A tail plethysmograph for measuring arterial blood pressure in dogs. *Proc. Soc. exp. Biol.*, N. Y., 1945, 58, 247-249.—A plethysmograph which can be applied to the tail of a dog to measure arterial blood pressure is described. This is a simple measuring instrument which affords easily repeatable recordings that are in close agreement with values obtained from the older methods requiring cannulating, puncturing, or exteriorizing of the artery.—C. P. Stone (N. Y. State Psychiat. Inst. & Hosp.).

1844. Ferguson, G. A. The applicability of quantitative method to psychological phenomena. *Bull. Canad. psychol. Ass.*, 1945, 5, 1-5.—"The present tendency is for psychometrics to become a branch of statistical mathematics as such, rather than a branch of psychology. Psychometricians have been so impressed by mathematical manipulation that they display a tendency to divorce themselves from the field of psychological enquiry. Frequently such individuals, having constructed an elegant mathematical structure, superimpose upon it by way of justification certain psychological meanings, and indicate that some psychological hypothesis is thereby proved." These statements are illustrated by reference to factor analysis.—F. W. Finger (Virginia).

1845. Greenwood, E. Experimental sociology: a study in method. New York: King's Crown Press, 1945. Pp. xiii + 163. \$2.25.—An experiment is the testing of a causal hypothesis through the study of contrasting situations in which all factors except one are controlled. Experiments may be projected, where controls are set up, a stimulus applied, and adjustments noted, or ex post facto, where the stimulus has already operated and methods of control are used to trace the relationship backward to antecedent conditions. They may be either simultaneous, where a stimulus is applied to two contrasting groups and the results noted, or successional, where a group's characteristics are noted before and after the application of a stimulus. The amount and types of control exercised are variables in experimentation. Technical problems and techniques of control include the identifying and selection of relevant factors, factor equations, frequency distributions, and randomization; some problems of control are purely social. The experimental aspect

of the ex post facto method is examined; the method is evaluated, and various ex post facto approaches are compared.—*H. A. Gibbard* (Brown).

1846. Holzinger, K. J. Interpretation of second-order factors. *Psychometrika*, 1945, 10, 21-25.—It is shown that a "second-order" factor pattern is equivalent to the transformation employed in rotating an orthogonal factor pattern to an oblique form. The correlation among the second-order factors may then be interpreted as due to the original first-order factors.—(Courtesy *Psychometrika*).

1847. Hunt, J. McV., Hunter, W. S., & Schlosberg, H. Raymond Royce Willoughby: 1896-1944. *Psychol. Rev.*, 1945, 52, 113-115.—Obituary and appreciation.—*M. A. Tinker* (Minnesota).

1848. Irving, J. A. Consciousness and behaviour; the meaning of scientific psychology. *Bull. Canad. psychol. Ass.*, 1945, 5, 10-15.—In this paper is "set forth what may be called the Verifiability Theory of Meaning as an alternative to Operationalism. . . ." According to this conception, psychology must deal with that which is meaningful, communicable, verifiable. For this reason, the subject matter of this science must be systems of behavior and not the content of consciousness.—*F. W. Finger* (Virginia).

1849. Lee, O. Value and interest. *J. Phil.*, 1945, 42, 141-161.—The author contrasts the "principle of efficiency" with the "principle of sufficiency." The former is the ideal of the maximum satisfaction of interests; the latter, that of organization, harmony, or unity. These principles conflict if both are taken as standards; but if either of them is chosen, the other is indispensable as a subsidiary. Three reasons are given for preferring the ideal of harmony or pattern: there are difficulties in the idea of a maximum; values can not be judged in isolation, but only in relation to some system of values; and an interest is bad if it clashes with others which are more basic. The interest theory has a basis in classical economic theory and in the old psychology of sensation. Recent psychology and biology, with their emphasis upon configuration, pattern, and organic striving, are found to support the principle of sufficiency. So far as they are dependent, "interest depends on value, rather than value on interest."—*R. H. Dotterer* (Pennsylvania State College).

1850. Mercier, L. J. A. Freedom of the will and psychology. *New Scholast.*, 1944, 18, 252-261.—"If neither freedom of the will nor determinism can be established by physiological experiments, the freedom of the will can nevertheless be objectively studied. The proof of the freedom of the will is not wholly a metaphysical problem because freedom of the will is exercised in the physical world. A great deal can be done to pin down its action as a factor of behavior both actual and historical. Otherwise there could be no science of man. On the other hand, the science of man is not purely a physical science. It must be ready to recognize both the metaphysical and physical factors: physical actions according to abstract principles constantly evident in human behavior. The freedom of the will is the freedom of an ego capable of conceiving universals.

Its exercise consists in choosing a particular behavior in the light of such universals. These universals can be exteriorized into objective facts, and the particular acts performed according to them are also objective facts. Therefore the freedom of the will can be studied experimentally by a case system." Such a case system recognizes not only the determining antecedents of a voluntary act but also the choice of a particular in the light of a universal, which is a "rising out of the domain of such particular determining antecedents." It is held that we can be truly positivistic only when we take into consideration all the facts pertaining to man.—*V. Nowlis* (Indiana).

1851. Richardson, C. H. An introduction to statistical analysis. (2nd ed.) New York: Harcourt, Brace, 1944. Pp. xiv + 498. \$4.00.—In this revised and enlarged edition the author has presented a greater accent on statistical evaluation and induction. In the first 10 chapters, on statistical description, the treatment is devoted to an introductory section, frequency distributions and graphs, central tendency, dispersion, skewness and kurtosis, index numbers, linear trends, simple correlation, multiple correlation, and nonlinear trends and curve fitting. The last 3 chapters are devoted to probability, binomial and normal curve, and the theory of sampling and reliability. A short appendix contains a supplementary reading list, a table of areas and ordinates of the normal curve, a table of 4-place logarithms and antilogarithms, and a section of answers to the exercises in the text. Algebraic derivations are presented of all the major formulas, and several of the exercises are in terms of properties, concepts, and derivations as well as the usual computational exercises. The examples used for description of computations and applications are chosen from a variety of fields including economics, agriculture, sociology, education, and psychology.—*T. G. Andrews* (Chicago).

1852. Robbie, W. A., & Leinfelder, P. J. A manometric apparatus for respiratory studies of small animals. *Science*, 1945, 101, 48-49.—*F. A. Mole* (Connecticut).

1853. Rorschach, O. Über das Leben und die Wesensart von Hermann Rorschach. (The life and essential nature of Hermann Rorschach.) *Schweiz. Arch. Neurol. Psychiat.*, 1944, 53, 1-11.—This is a biography, character sketch, and personal tribute by Frau Dr. Rorschach. Rorschach's development was on a scientific basis, with artistic interests, but his attitude toward life and people was determined emotionally. Although he spoke little on the subject, he regarded his *Psychodiagnostik* as the key to man's nature and potentialities and to cultures, and he visualized the possibility that the method might eventually develop into a kind of human synthesis. At the time of his death, he considered the book already outdated. Believing that his test had no theoretical basis, he deprecated its premature popularization and the tendency to direct it into other paths. Portrait and complete bibliography.—*M. E. Morse* (Baltimore, Md.).

1854. Sargent, H. Professional ethics and problems of therapy. *J. abnorm. soc. Psychol.*, 1945, 40, 47-60.—The writer approves of much of Sutich's

suggested code of ethics for consulting psychology (see 18: 3689) but objects to the tenets that conflict with the Rogers nondirective techniques of consultation and to some of the suggested ways of following the code. The code should be democratic but not a tool for promoting democracy. Among rejected tenets are (a) those duties of the client which presuppose initial insight and democratic balance and (b) those 'duties' and 'rights' of the counselor that might interfere with rapport or with therapeutic effectiveness. Several tenets are qualified with suggestions for achieving the spirit of the tenets informally, without lectures or reproaches to the client.—C. M. Harsh (Nebraska).

1855. Tolman, E. C. A stimulus-expectancy need-cathexis psychology. *Science*, 1945, 101, 160-166.—Three important problems (intelligence, motivation, and conflict) and the contributions which the animal psychologists, particularly those working with rats, can make toward their understanding are discussed. The author believes that, "whereas man's successes, persistences and socially unacceptable divagations—that is, his intelligences, his motivations and his instabilities—are all ultimately shaped and materialized by specific cultures, it is still true that most of the formal underlying laws of intelligence, motivation and instability can still be studied in rats as well as, and more easily than, in men."—F. A. Mote (Connecticut).

1856. Turner, G. H. Psychological aspects of operational research in the Canadian Army. *Bull. Canad. psychol. Ass.*, 1945, 5, 15-17.—Psychological research in the Canadian Army involves many problems of military significance, particularly those of morale, selection, and training. Qualifications for research men in this general area are discussed briefly.—F. W. Finger (Virginia).

1857. Visher, S. S. Comparative university strength in scientists starred in "American Men of Science" V-VII. *Science*, 1945, 101, 272-273.—A table gives data for 30 institutions with 3 or more starred scientists in 1944, showing the number starred from 1933 to 1944, their total teaching staff in 1944, the starred scientists as a percentage of the total staff, and other information. It is seen that the institutions having the largest number of starred scientists are not necessarily those with the greatest percentage.—F. A. Mote (Connecticut).

NERVOUS SYSTEM

1858. Barnes, T. C., & Beutner, R. Electrical pulsations in the human brain. *Trans. N. Y. Acad. Sci.*, 1945, 7, 87-89.—The authors give a brief, nontechnical summary of some aspects of electroencephalography, including a report that artificial electrical brain waves have been produced "by bringing acetylcholine into contact with brain extract."—F. W. Finger (Virginia).

1859. Kupalov, P. S. Osobennosti korykovykh protsessov i funktsional'noi organizatsii bol'shikh polusharii. (Peculiarities of the cortical processes and of functional organization of the great hemispheres.) *Ark. biol. Nauk.*, 1939, 54, No. 1, 14-22.—The author refers to Pavlov's contention that the adjectives "higher nervous" correspond to the ad-

jective "psychical" and presents experimental data for the discussion of the following question: Speaking of cortical processes, do we mean psychic processes? Dolin secured conditioned convulsions by combining a sound stimulus with the introduction of camphor. Kupalov states that on the basis of his and Bykov's work, the cortex not only plays the role of an impulse initiator, selecting responses, but also takes part in the response. For some time, experiments have been proceeding on subjecting the thoracic region of the spinal cord of a frog to radium emanations. In one series of experiments, the nerve supplying one side of the frog from the thoracic region of the spinal cord was cut. The muscles in the intact region, after the above radium emanations were applied, lost their striated appearance and were destroyed. The muscles whose nerve connections were severed were still functional and retained their striated cell structure. After a discussion of the data, the author states that the functional physiological organization of the great hemisphere is both an organization at rest and an organization in activity; in other words, the physiological rest is active. Then conditioned inhibition was formed on the introduction of morphine. Kupalov is convinced that the cortex is able to change its organization and to fixate any new complex, even pathological integration.—P. Worchel (U. S. Naval Reserve).

1860. Will, O. A., Jr. Electroencephalography in the study of chronic behavior problems. *Nav. med. Bull., Wash.*, 1945, 44, 341-352.—A survey is made of electroencephalographic findings both of behavior problem individuals and of various types of mental abnormalities. A high percentage of abnormal brain waves is noted both for the mentally ill and for the disciplinary cases, indicating a disturbance of brain physiology. It is suggested that many of the disciplinary cases are mentally ill and that an electroencephalographic study would be an advisable routine for the more severe disciplinary cases. 95-item bibliography.—G. W. Knox (U. S. Naval Reserve).

[See also abstracts 1908, 1920, 1926, 1939, 1956, 1958, 2074, 2078.]

RECEPTIVE AND PERCEPTUAL PROCESSES

1861. [Anon.] Color blindness. Part I. *Amer. Pap. Pulp Ass. Instrumentation Rep.*, 1941, 34, Pp. 28.—The Ishihara test may be used in conjunction with a test of color aptitude to select observers for matching samples in the paper industry. Colorimetric data on color matches by a green-blind observer are presented in detail, and four of his matches are reproduced in a color plate. There are summaries in tabular and graphical form of data on color blindness, and an extensive bibliography.—L. A. Riggs (Brown).

1862. [Anon.] Color blindness. Part II: Progress report on the study of color blindness by means of a monochromatic colorimeter. *Amer. Pap. Pulp Ass. Instrumentation Rep.*, 1945, 34, Pp. 35.—A grating spectrometer system is described for measuring color difference thresholds over the entire

spectral range. The use of this instrument on observers of normal color vision has revealed large individual differences in respect to these thresholds. The data are consistent with the finding that normal observers differ considerably in color matching performance tests.—*L. A. Riggs (Brown)*.

1863. Ansbacher, H. L., & Mather, K. Group differences in size estimation. *Psychometrika*, 1945, 10, 37-56.—Fifty-two subjects, differing in sex, age, education, and domicile (rural or urban), were given the problem of judging the height of an upright board in a natural setting. A preliminary analysis was made on the basis of the simple initial ratio method, both for the original data in feet and for original data converted to log units. Because the effects of interaction of the several variables made the results of this method inconclusive, the analysis of variance technique, as described by Yates for data where the classes are not equally represented, was applied. This technique showed that, while together the four factors markedly affected judgment, sex had no significant individual effect, age had the biggest individual effect but possibly a spurious one, education and domicile had suspiciously large individual effects, and the effect of the four factors may be regarded as simply additive. The relation of the findings to those of previous investigators is discussed. The authors regard as an important result of the analysis the guidance it offers in the design of further experiments, since it demonstrates the value of equal representation for all classes into which data are to be segregated.—(Courtesy *Psychometrika*).

1864. Aubry, M., & Giraud, J. C. Le problème de l'assourdissement dans l'examen de l'audition. (The problem of muffling in the testing of hearing.) *Ann. Oto-laryng.*, 1939, No. 4, 333-348.—It is difficult to suppress satisfactorily the action of one ear while the other is being tested. It is believed that an acceptable method must insure total suppression of auditory perception (via bone transmission) when both ears are muffled and must be such that, in the normal subject, muffling of one ear shall have no effect on the hearing of the other ear. No method currently in use satisfies these requirements. It is suggested that the nontested ear can be muffled effectively by a jet of compressed air directed against the tympanic membrane. Limitations of the method are pointed out.—(Courtesy *Année psychol.*).

1865. Beebe-Center, J. G., Carmichael, L., & Mead, L. C. Daylight training of pilots for night flying. *Aeronaut. Engng Rev.*, 1944, 3, 1-10.—A technique for training pilots in night flying during the daytime consists of covering the windshield and windows of the plane with green acetate and having the student wear red goggles, while the instructor wears no goggles. The present research is concerned with evaluating the efficiency of depth perception in terms of the standard deviation of scores in an experimental situation simulating that of a cockpit so outfitted. Quantitative evidence is thus secured that conditions of night flying have been attained for the student without unduly impairing the visual efficiency of the instructor.—*L. A. Riggs (Brown)*.

1866. Bernyer, G., Durup, G., & Piéron, H. Contribution à l'étude des conflits perceptifs. Relation des appréciations de distance et de dimension. (A contribution to the study of perceptive conflicts: the relation between distance judgment and size judgments.) *Année psychol.*, 1942, 40, 15-51.—A method is described (following an earlier work by Bédère) by means of which a conflict is engendered between the depth perception based on degree of convergence and the judgment of size based on extent of retinal image. When these values are varied within certain limits of convergence, both judgments remain correct, in spite of the contradiction they imply. When these limits are exceeded, a sort of compromise results, and both the distance and the size are judged smaller than the convergence and the retinal image would respectively indicate. In general, however, the variations in retinal image predominate over the cues of convergence required for binocular fusion, in the judgment of depth. Individual differences and intra-individual differences based on set are reported.—*F. W. Finger (Virginia)*.

1867. Beyne, —. La mesure de la valeur fonctionnelle auditive. Le problème de l'acoumétrie. (The measurement of the functional auditory value. The problem of acoumetry.) *Rev. Serv. Santé milit.*, Paris, 1939, 110, 631-643.—The difficulties are outlined of precise determination of auditory thresholds for varying frequencies, with a consideration of such relevant factors as extraneous noise, impurity of the test tone, and method of listening. Modern forms of testing equipment are discussed.—(Courtesy *Année psychol.*).

1868. Bogoslovsky, A. I. The conditioned reflexes of the contrast sensitivity of the eye. *Bull. Biol. Méd. exp. URSS*, 1939, 8, 291-294.—Increase in brightness leads to an increase in differential sensitivity. After this effect has been paired with the sound of a metronome, the latter is sufficient to produce the increase. This effect is particularly marked when red light is used with a dark-adapted eye, and thus seems independent of rod function.—(Courtesy *Année psychol.*).

1869. Brandis, S. A. Changes in the sensitivity of the human eye to light induced by physical strain. *Bull. Biol. Méd. exp. URSS*, 1938, 6, 340-342.—In individuals who have not been subjected to physical conditioning, the sensitivity to light increases after a brief period of vigorous work. To a certain extent, increases in the amount of effort expended are paralleled by sensitivity increments. A phase of subnormal response precedes final return to normal. When training is given the subject (repeated 5-minute intervals of exertion), the effect diminishes. An explanation of the phenomenon is attempted in terms of a cortical irradiation of excitation originating in the motor centers.—(Courtesy *Année psychol.*).

1870. Brandis, S. A. Changes in the light sensitivity of the human eye caused by mental labour. *Bull. Biol. Méd. exp. URSS*, 1939, 8, 98-100.—In contrast to the enhancement of sensitivity after physical work, this experiment shows light sensitivity to fall off as much as 45% after mental work. Recovery takes 10-12 min., and physical conditioning

decreases the effect. A central inhibition is postulated to account for the findings.—(Courtesy *Année psychol.*)

1871. Brandis, S. A. Contribution to the analysis of the changes of sensitivity of the human eye to light, with reference to various types of work performed by the subject. *Bull. Biol. Méd. exp. URSS.*, 1939, 8, 443-445.—Physical work is accompanied by an increase in light sensitivity; mental work, by a decrease. The former effect is attributed to a radiation of excitation from the sensorimotor centers to the optic centers; the latter, to an inhibitory effect. The existence of a dominant region and of an inhibitory process in adjacent cortical regions is in accord with the experimenter's finding that the addition of mental activity to physical work eliminates a sensation of fatigue. Caffeine decreases the inhibitory effect of mental work and increases the excitement produced by physical work; bromide decreases these effects.—(Courtesy *Année psychol.*)

1872. Brues, C. T. Food preferences of the Colorado potato-beetle, *Leptinotarsa decemlineata* Soy. *Psyche, Camb., Mass.*, 1940, 47, 38-43.—Even though the beetles seem to make a differential choice of foodstuffs, the choice is not always compatible with nutrient requirements.—A. C. Hoffman (Tufts).

1873. Campbell, P. A. The progress of aviation otology in World War II. *Laryngoscope, St Louis*, 1944, 54, 387-397.—This paper is a necessarily general review of the work of the Research Laboratory of the Army Air Forces School of Aviation Medicine (Randolph Field, Texas) on the effects of aircraft noise, effect of noise on intelligibility of communication, protection against noise, and air-sickness.—A. C. Hoffman (Tufts).

1874. Fowler, E. P. Head noises in normal and in disordered ears. *Arch. Otolaryng., Chicago*, 1944, 39, 498-503.—The pitch, loudness, and timbre of tinnitus can be measured by comparing it with a real sound—a bracketing technique for this comparison is suggested. The review of masking phenomena indicates that the masking of tinnitus by an environmental sound is subject to the same conditions as the masking of a similar external sound by another actual sound. 'Autogenous vibratory head noises' refer to the perception of sounds produced inside the body and as such are considered by the author as real sounds rather than illusions. When tonal in character, they are low in frequency; they are usually sensed only on the side on which they are louder, being masked in the opposite ear; and they are often difficult to locate as to locus of origin. The 'non-vibratory type' of tinnitus is caused by direct irritation of the auditory neural mechanism, and as such it is an auditory hallucination usually exaggerated in character and loudness. Among the causes of this type reviewed in the article are acoustic shock from continuous loud sounds, explosions, or blows; effects of drugs; muscular strain or pressure; and psychoneurological disturbances. The management of the patient and the treatment of tinnitus are discussed.—A. C. Hoffman (Tufts).

1875. Fowler, E. P. The aging ear. *Arch. Otolaryng., Chicago*, 1944, 40, 475-480.—Changes with age of the anatomical parts of the auditory

and vestibular mechanisms together with their neural apparatus are reviewed, and disorders and diseases of the aging ear are discussed. If a hearing loss occurs, it may be in the high frequencies, in the speech range, or in the region of 4096 cycles per sec. The author questions whether any of these losses are purely a function of aging.—A. C. Hoffman (Tufts).

1876. Goldman, J. L. A comparative study of whisper tests and audiograms. *Laryngoscope, St Louis*, 1944, 54, 559-572.—Whisper or low conversation test scores are compared with the audiograms of Army Air Forces personnel diagnosed as having nerve type deafness, conduction type deafness, mixed type deafness, deafness associated with healed or active otitis media, deafness following injury or specific disease, deafness following mastoidectomy, or otosclerosis. "A study of the above data reveals that there is no constant correlation between hearing perception . . . and the air-conduction audiograms. The variations between the two findings have a wide range; however, there does seem to be a close relationship between whisper hearing perception and audiometric findings when impaired hearing exists in both ears of the same individual. . . . It is very likely that too many additional complex factors enter the formation of vocalized speech for it to be compared with the composite individual frequencies believed to be included in the speech range of the audiometer."—A. C. Hoffman (Tufts).

1877. Gordon, A. M. Some aspects of sensory discrimination in mongolism. *Amer. J. ment. Def.*, 1944, 49, 55-63.—In order to determine if there is any difference between the sensory function of the mongol as compared with the normal population of equivalent intellectual attainment and to isolate the difference if one appeared, various experiments of sensory discrimination were made with mongols and young children. It was found that the experiments in tactile discrimination were easier than the visual experiments for the normal group, whereas the reverse held true for the mongols.—S. Whiteside (Cincinnati Public Schools).

1878. Gordon, B., Lederer, F. L., Truex, E. H., & others. Symposium: The rehabilitation of the war-deafened. I. Historical and veterans' aspects. II. The rehabilitation program of the Navy: aural casualties. III. Hearing rehabilitation at Deshaus General Hospital. IV. The civilian program of the American Academy of Ophthalmology and Otolaryngology. *Laryngoscope, St Louis*, 1944, 54, 482-510.—This symposium is concerned with the formal procedures, methods, personnel, and therapeutic techniques, both otological and psychological, of the rehabilitation program for aural casualties.—A. C. Hoffman (Tufts).

1879. Granit, R., & Svaetichin, G. Principles and technique of the electro-physiological analysis of colour reception with the aid of microelectrodes. *Uppsala LäkFören. Förh.*, 1939, 45, 161-177.—Microelectrodes were placed on the frog retina in such fashion as to record from single fibers. Hartline's observations of 'on' and 'off' effects were confirmed. Recording from the single fibers, thresholds were determined in response to narrowly-localized monochromatic stimulation. The sensitivity curves of the isolated cones were found to be variable (with

maxima between 450 $m\mu$ and 600 $m\mu$) and to be more circumscribed than the visibility curve which represents in actuality a statistical summation. There appears to be considerable heterogeneity of color receptors, with probably a greater number of systems than the trichromatic theory involves.—(Courtesy *Année psychol.*)

1880. Grossman, F. M., & Malloy, C. T. Physical characteristics of some bone oscillators used with commercially available audiometers. *Arch. Otolaryng., Chicago*, 1944, 40, 282-287.—The sources of errors (in frequency response, in frequency response with load impedance, and in nonlinearity) which occur in present methods employed in the audiometric testing of hearing by bone conduction are believed by the present authors to be in the bone conductor apparatus itself.—A. C. Hoffman (Tufts).

1881. Humphrey, G., & Hoffman, J. Experiments on the vertical and horizontal perception of depth. *Bull. Canad. psychol. Ass.*, 1945, 5, 6-10.—Depth perception was measured both horizontally and vertically by the Howard Dolman apparatus, with 30 college students as subjects. 14 subjects scored higher on the horizontal test than on the vertical; in 9 subjects the difference was statistically significant. It is concluded that a different psychological factor is involved in the vertical perception, and that therefore the lack of measurement of this decreases the predictive value of the usual Howard Dolman test for pilot success.—F. W. Finger (Virginia).

1882. Hunt, W. H. Rehabilitation. *Laryngoscope, St Louis*, 1944, 54, 229-234.—This third paper of a symposium on progressive deafness enjoins the otologist to consider several psychological aspects of the problem of rehabilitating the hard-of-hearing—the patient's personality, the effect on him of the impairment, and his reaction to various aspects of the diagnosis and therapy.—A. C. Hoffman (Tufts).

1883. Kravkov, S. V. Stimulating visual function. *Amer. Rev. Soviet Med.*, 1945, 2, 353-355.—A test for scotopic vision, based on the Purkinje phenomenon, and a test for visual acuity, based on contrast sensitivity, are described briefly. Also discussed are 3 methods for increasing light sensitivity and discrimination of the eye: the introduction of a short flash of light during dark adaptation; the use of strychnine; and the use of benzedrine. The last method is not recommended as a suitable means for augmenting visual observations.—L. C. Mead (Tufts).

1884. Larsell, O., McCrady, E., & Larsell, J. F. Development of the organ of Corti in relation to the inception of hearing. *Arch. Otolaryng., Chicago*, 1944, 40, 233-248.—The histological differentiation of the cochlea of the developing opossum (48-77 days post partum) is traced in relation to the range of hearing as measured by oscillograph methods. "The earliest differentiation of the organ of Corti to an apparently functional stage was found in the upper part of the basal coil and the adjacent lower part of the medial coil. This differentiation consists in an elaboration of the pillars of Corti, the tunnel, the phalangeal cells and the reticular plate, their condition then approaching adult structure, and in

enlargement of the hair cells. As the opossum continues to develop, the differentiation of the organ of Corti extends both apically and basally from this initial zone. *Pari passu*, there is an increase in total range from an initial zone of 1000 to 1300 cycles to a range of 200 to 26,000 cycles per second. A lowering of the sound intensity required for response to notes of given frequency also accompanies development and appears to be correlated with the histogenesis of the elements of the organ of Corti. . . . We can ascribe a function to each of the parts of the complex auditory mechanism, instead of giving the basilar membrane alone the stimulating function."—A. C. Hoffman (Tufts).

1885. Lurie, M. H., Davis, H., & Hawkins, J. E., Jr. Acoustic trauma of the organ of Corti in the guinea pig. *Laryngoscope, St Louis*, 1944, 54, 375-386.—Over 200 guinea pigs were exposed for varying periods of time (3 sec.-8 min.) to tones of various frequencies (500-700 cycles per sec.) at various intensities (140-157 db.). The least unquestionable anatomical damage to the organ of Corti was found to be the disappearance of the mesothelial cells lying under the basilar membrane; the severest damage noted was the rupture and dislocation of the organ of Corti from the basilar membrane (which may occur without apparent injury to the eardrum or ossicles). A few days or weeks after exposure, the organ of Corti at the site of the lesion degenerates and is absorbed, and the associated nerve fibers and ganglion cells begin to degenerate. The amount of damage to the organ of Corti is related to the intensity and duration of the exposure tone; the location of maximum damage is related to the frequency of the exposure tone (nearer the helicotrema for low tones, nearer the round window for high). Correspondence between the area of anatomical damage and rise in the threshold of the aural microphonics (Wever-Bray effect) was noted, but the relationship was not exact or invariable; hence the authors regard the study of anatomical changes as the more reliable.—A. C. Hoffman (Tufts).

1886. McNally, W. J. The otoliths and the part they play in man. *Laryngoscope, St Louis*, 1944, 54, 304-323.—The following conclusions were drawn from a review of the experimental literature on the functions of the vestibular mechanism with special reference to motion sickness: The utricle, but not the saccule, has equilibratory functions, and along with the semicircular canals is concerned in the maintenance of postural tone. The modus operandi of utricular stimulation is not understood, but the sources of stimulation are shown to be head movements (force of gravity), centrifugal force, linear acceleration in any direction, and angular acceleration about a horizontal but not a vertical axis. The vestibular mechanism does not react when the head is at rest, but only during the changes suggested by the above conditions of stimulation; the new position 'dictated' by the vestibular mechanism is held by a 'holding mechanism of the muscles.' The evidence (pro and con) is discussed for concluding that it is excessive linear acceleration stimulating the utricle which is responsible for the symptoms of motion sickness.—A. C. Hoffman (Tufts).

1887. Malone, P. W. Aviation deafness. *Arch. Otolaryng., Chicago*, 1944, 40, 468-474.—The types, causes, and prevention of deafness in aircraft personnel are reviewed. Aviation perception deafness (fatigue and injury of the inner ear) due to loud noises or continued exposure to noise usually occurs in the frequency region of 4096 cycles per second. Aviation pressure deafness (impaired ability of the structures of the middle ear to transmit sound properly) usually results from failure or inability to ventilate the middle ear in order to equalize pressure. This last anomaly is more often detected, since the hearing loss frequently occurs in the conversational tone range (128-1024 cycles).—A. C. Hoffman (Tufts).

1888. Moure, J. P. Contribution à l'étude de l'audiométrie. (A contribution to the study of audiometry.) *Rev. Laryng., Bordeaux*, 1939, 60, 3-60.—The writer reviews the basic principles of radio-electric audiometry, techniques of examination, and results obtained from defective ears. The advantages and disadvantages of the method are outlined. The tediousness of audiometric examination will probably prevent its universal application.—(Courtesy *Année psychol.*)

1889. Ogle, K. N., & Madigan, L. F. Astigmatism at oblique axes and binocular stereoscopic spatial localization. *Arch. Ophthalm., Chicago*, 1945, 33, 116-127.—Correction of oblique astigmatism introduces meridional magnifications which may result in apparent tilting of objects toward or away from the observer. The Ames space eikonometer provides a means of measuring the apparent vertical declination. Of 419 subjects tested, 309 had oblique astigmatism. Of these, only 10% failed to show measurable errors of declination (as compared with 50% of normals and subjects with nonoblique astigmatism) and 74% showed measurable errors which were in the direction anticipated from calculations. The observed error tended to be less than the calculated error, but the reverse relationship was noted occasionally. Various explanations of the discrepancies are suggested: effect of some compensating mechanism, anomalous retinal organization, basic aniseikonia, and cyclotorsion. The results are interpreted as favoring Hering's theory of innate and stable retinal correspondence.—M. R. Stoll (American Optical Co.).

1890. Peddie, W. The development of the trichromatic theory of colour vision. A correction. *Phil. Mag.*, 1944, 35, 209-210.—See 17: 1877.

1891. Piéron, H. Recherches sur la validité de la loi d'Abney impliquant l'addition intégrale des valences lumineuses élémentaires dans les flux composites. (Studies of the validity of Abney's law, involving the integral addition of elementary brightness values in composite fluxes.) *Année psychol.*, 1942, 40, 52-83.—When 2 monochromatic lights stimulate the foveal region simultaneously, the luminous effectiveness of the combination is not as great as the sum of the 2 presented separately. When neighboring wave lengths are used, the summation conforms to Abney's law; but with more widely separated wave lengths, there is a dropping off of the total effectiveness, reaching a maximum in the mixture of complements. This drop from the

expected value is about 10% when the direct method of flicker comparison is used, with decreases up to 40% when the evaluation is made by other techniques. The possible biochemical basis of the phenomenon is considered.—F. W. Finger (Virginia).

1892. Senturia, B. H. Auditory acuity of aviation cadets. *Ann. Otol., etc., St. Louis*, 1944, 53, 705-716.—In the interest of supplying control data with which to compare the recent findings of 'traumatic deafness' among military aircraft personnel based on audiograms made after exposure, the present author audiometrically tested the acuity of 500 male observers before exposure to aircraft noise, gunfire, or barotrauma. Of these 500 threshold curves, about 34% did not deviate more than 10 db. below the audiometric zero-line for the frequencies 1,024 to 11,584 cycles per sec. ('normal'); about 23% showed a tonal dip at around 4,096 c.p.s. ('airplane notch'); about 19% showed this V-notch and additional losses of more than 10 db. at higher or lower frequencies; and about 24% of the audiometric threshold curves were characterized by a progressive or variable high-tone loss greater than 10 db. The audiograms of both ears were similar for about 50% of the observers. "A re-evaluation of the tonal dip should be undertaken by those who would consider this type of defect pathognomonic of airplane noise exposure."—A. C. Hoffman (Tufts).

1893. Sherman, H. The eye in the arts. *Educ. Res. Bull., Ohio St. Univ.*, 1944, 23, 1-6.—The author reports gains by an experimental group much in excess of gains by a control group in peripheral acuity, central stereo-acuity, and peripheral stereo-acuity as a result of an experimental project in elementary drawing and painting. The experimental group also gained in brightness discrimination, but no comparison was made with the control group. In central acuity, the controls improved more than the experimental group. The author states that the training in drawing used was also training in vision but doubts that "just any kind of training in drawing and painting would bring these results," although "the most effective programs in drawing and painting will show changes in eye behavior."—M. V. Louden (Pittsburgh).

1894. Silcox, L. E., & Schenck, H. P. Blast injury of the ears. *Arch. Otolaryng., Chicago*, 1944, 39, 413-420.—The clinical and audiometric effects of atmospheric (e.g., gun shots) and immersion (e.g., depth bombs) blast injuries in 82 patients are reviewed. The tensor tympani and stapedius reflexes are of no protective value, since their latent periods are between 5 and 10 ms. as opposed to the less than 1 ms. required for the pressure of the blast to reach maximum intensity. In the majority of the audiograms, the greatest loss was in the higher frequencies; when tinnitus was present, it was high pitched, constant, and bilateral. Other symptoms of concussion described were dizziness with demonstrable nystagmus, blurring of vision, and inability to concentrate. What recovery of auditory acuity was noted, occurred within two weeks after the blast injury.—A. C. Hoffman (Tufts).

1895. Sloan, L. L. Quantitative test for measurement of the degree of red-green color deficiency. *Arch. Ophthalm., Chicago*, 1945, 33, 161.—The test

utilizes a threshold lantern designed to show each of 8 different colors at 8 different levels of intensity. Small visual areas are stimulated and low intensities are used. Color naming is required. Field tests with signal lights indicated that the threshold lantern provided better prediction of success than any of several other color tests which also yielded quantitative scores.—*M. R. Stoll* (American Optical Co.).

1896. Spiegelman, S., & Reiner, J. M. A note on steady states and the Weber-Fechner law. *Psychometrika*, 1945, 10, 27-35.—The steady state of a simple reaction system has been shown to have some of the properties of a psychophysical discrimination system, including the possibility of deducing a generalized Weber-Fechner law, both in integral form and in difference form. The Weber ratio so deduced is not constant, and its dependence on stimulus intensity is exhibited. The dependence of the difference limen on the internal threshold is discussed; it is found that in general there is a finite value of this threshold for which response is impossible. This critical threshold is lower for higher values of the reference stimulus intensity. Similarly, it is shown that the difference limen and the Weber ratio, for a fixed value of the threshold, become infinite (i.e., discrimination is impossible) for a value of the stimulus intensity which in general is finite.—(Courtesy *Psychometrika*).

1897. Strozcka, L. J. Influence de l'excitation auditive sur le contraste achromatique. (The influence of auditory excitation upon achromatic contrast.) *Bull. Biol. Méd. exp. URSS*, 1939, 8, 295-297.—The subjects estimated the brightness of varying shades of gray, with either slightly contrasting or greatly contrasting gray standards. With auditory stimulation (8-15 min., 780 c.p.s., 70 db.), 64 of 80 subjects reported a 2-3% lessening of the smaller contrast and a 6-15% increase in the greater contrast. In 2 subjects a reverse effect was noted; there was no change in 14.—(Courtesy *Année psychol.*).

1898. Taylor, H. M. Traumatic deafness; problems of prevention. *Laryngoscope*, St Louis, 1944, 54, 362-373.—"The necessity of adequate acoustic insulation for members of the armed forces and for workers exposed to the noises of industry is emphasized."—*A. C. Hoffman* (Tufts).

1899. Ullman, E. V. Traumatic deafness in combat flyers. *Arch. Otolaryng.*, Chicago, 1944, 40, 374-381.—The amount of damage to hearing as indicated in audiograms was found to be related to the number of hours flown in heavy aircraft (Fortresses and Liberators). Thirty percent of the officers (pilots, etc.) and 60% of the enlisted men (gunners) tested were found to have an audiometric deficiency of more than 50 db. in at least one frequency—often at a frequency of 2896 cycles instead of at 4096 as reported in other studies of aviation personnel. The possible causes of traumatic deafness are discussed.—*A. C. Hoffman* (Tufts).

1900. [Various.] Symposium on the rehabilitation of the deaf and the hard of hearing. College of Physicians of Philadelphia, Section on Otolaryngology, and the Philadelphia Laryngological Society. *Arch. Otolaryng.*, Chicago, 1944, 40, 422-427.—

Medical, civilian, and military problems (hearing aids, audiometric tests, re-education, etc.) of rehabilitating the deaf and hard of hearing were discussed.—*A. C. Hoffman* (Tufts).

1901. Wald, G., & Burian, H. M. Dissociation of form and light perception in patients with amblyopia ex anopsia. *Arch. Ophthalm.*, Chicago, 1945, 33, 160-161.—Both eyes of 5 patients with monocular amblyopia, which reduced vision to 20/200 or less, were tested monocularly. Peripheral dark adaptation, light thresholds for a field of 1° fixated progressively from 10° above to 10° below the fovea, and spectral sensitivity of the fovea and peripheral retina were measured. In no case were results for the two eyes significantly different. Apparently light perception is normal and amblyopia is restricted to perception of pattern.—*M. R. Stoll* (American Optical Co.).

1902. Watson, L. A. Certain fundamental principles in prescribing and fitting hearing aids. *Laryngoscope*, St Louis, 1944, 54, 531-558.—Problems in prescribing hearing aids are discussed. Whisper tests of hearing loss are subject to errors because of the wide variations in the acoustical properties of whisperers' voices, the modifying effect of the acoustics in the rooms in which the test is given, and the ability of the ear to accommodate for deficiencies during the short periods of the testing time. Assuming that the patient's audiogram is fairly regular throughout the frequency range, hearing aids are considered beneficial in cases of loss of from 25 to 100 db. in the speech range of frequencies. In general, the choice of which ear to fit depends on the possibility of maintaining binaural hearing, since this condition is optimal for auditory perception. Bone conduction receivers emphasize the lower and middle frequency ranges but impair reproduction of frequencies in the higher consonant range (1800-3000 cycles). As the intensity of sound increases above threshold, recruitment may occur; therefore, a loss at threshold may not correspondingly appear at higher physical intensities. Certain mechanical problems of adjusting the frequency and loudness characteristics of the aid to suit individual needs are also discussed.—*A. C. Hoffman* (Tufts).

1903. Wilson, W. H. Prevention of traumatic deafness. *Arch. Otolaryng.*, Chicago, 1944, 40, 52-59.—In the interest of validating a procedure for selecting persons susceptible to the effects of noise, three audiograms of each of 108 inductees were determined (test 1) before and (test 2) just after an 8-minute exposure of one ear at a time to a fatiguing tone of 2048 cycles per sec., and (test 3) again after basic training in pistol and rifle firing. A rise in threshold of 10 db. or more above the original level for one or more of the tested frequencies was regarded as indicating a loss—auditory fatigue. Of the 30 soldiers indicating loss at test 2, 25 also indicated loss at test 3. Of the 78 soldiers who showed no loss at test 2, 14 showed loss at test 3. Audiograms of 26 of the 39 soldiers indicating loss at test 3 were again determined after a 7-day period; 16 of these 26 still showed some loss. The finding in this study, that 22 of the 30 men showing auditory fatigue at test 2 did so at 4096 cycles (despite the 2048 cycles

of the fatiguing tone), led to a second study in which the procedure of tests 1 and 2 was repeated on 268 additional soldiers. The test 2 audiograms of 66 of these 268 indicated auditory loss at 4096—a ratio regarded as similar to that found in the first study (22/108). The author believes this auditory fatigue test procedure affords means of screening out susceptible persons.—*A. C. Hoffman* (Tufts).

1904. Young, R. W. Some problems of postwar musical acoustics. *J. acoust. Soc. Amer.*, 1944, 16, 103-107.—The problems outlined include the musical standards for judgment of performance in a musical instrument, the design of instruments with respect to tuning and stability, and instruments for the study of musical sounds.—*E. G. Weaver* (Princeton).

[See also abstracts 1909, 1938, 1946, 1950, 1951, 1983, 2028, 2047, 2073, 2076.]

LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

1905. Maier, N. R. F., & Klee, J. B. Studies of abnormal behavior in the rat: XVII. Guidance versus trial and error in the alteration of habits and fixations. *J. Psychol.*, 1945, 19, 133-163.—Four groups of rats (approximately 15 each) learned position responses on a jumping discrimination apparatus, two groups under conditions of frustration (insoluble problem) and two under the usual motivation conditions of selective reward and punishment. One group from each of the above pairs changed to a discrimination response by trial and error; in the second group from each pair, guidance was used in conjunction with trial and error. Fixated position responses appeared more frequently during learning under conditions of frustration, while the trial and error method for replacing one response by another led to more fixations than the guidance method. Animals learning the discrimination response by trial and error showed fewer transition trials from position response than did those learning by guidance. Guidance appeared effective in breaking an old response but not highly effective in teaching a new one.—*R. B. Ammons* (Iowa).

1906. Mowrer, O. H., & Ullman, A. D. Time as a determinant in integrative learning. *Psychol. Rev.*, 1945, 52, 61-90.—Living organisms sometimes manifest behavior which is chronically nonintegrative, that is, behavior which is consistently more punishing than rewarding. An attempt is made to show that the factor of time must be taken into account for a satisfactory explanation of such behavior. Because of certain limitations, the Law of Exercise and the Law of Effect do not explain the behavior. "An experimental paradigm with rats as subjects shows that the tendency for a given action to be perpetuated or inhibited is influenced not only by the nature of the consequences ('effects') of that action but also by the temporal order, or timing, of these consequences." Analysis of integration and integration-failure is carried over into human behavior. Rationality is located midway on a continuum between the prerational (lower animals) and the irra-

tional adjustive processes. 90-item bibliography.—*M. A. Tinker* (Minnesota).

1907. Thompson, G. N. Psychiatric factors influencing learning. *J. nerv. ment. Dis.*, 1945, 101, 347-356.—Any factor, social or psychological, which affects learning is called a psychiatric factor. Three classes of such factors are discussed: abnormal factors from a theoretically normal mind, such as "nervousness"; factors from the mind when mental illness is incipient or latent, as in convulsive disorders, the growth of neoplasms, and the development of schizophrenia; and factors from a mind which is already disordered, as in brain-damaged cases. The second class of factors is often over-emphasized; emotional disturbances and neuro-pathic traits are present, rather than incipient, mental illnesses.—*L. B. Heathers* (Smith).

[See also abstracts 1855, 1868, 1928, 1931, 1933, 2017, 2029, 2055, 2066, 2077.]

MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

1908. Barron, D. H. Developmental physiology. *Annu. Rev. Physiol.*, 1945, 7, 107-126.—This is a general review of the literature including a discussion of developmental neural processes, where the work of Coghill, Hooker, and others on reflex development is summarized. 140-item bibliography.—*W. S. Hunter* (Brown).

1909. Bogoslovsky, A. I. The influence of dark and light adaptation upon the muscle balance of the eye. *Bull. Biol. Méd. exp. URSS*, 1939, 8, 390-392.—The Maddon photometer was used to measure the degree of heterophoria. Dark adaptation was found to increase exophoria, while light adaptation had a reverse effect, tending to orthophoria.—(Courtesy *Année psychol.*)

1910. Clarke, H. H. The application of measurement to health and physical education. New York: Prentice-Hall, 1945. Pp. xvi + 415. \$5.00.—The author, after defining the optimal and minimal objectives of a physical education program, stresses the need for and the means by which rigorous measurement facilitates the program and assists in evaluating progress. The volume provides in its 17 chapters the logic and the methodology inherent in the operation of a well-rounded sports program so that physical, social, and cultural development is enhanced. The use of measuring instruments whose reliabilities and validities are known is emphasized, and an evaluative description of these tools and their techniques of administration is given. An appendix provides a brief description of basic statistical concepts as well as a series of norms pursuant to the text's discussion of physical fitness, strength, and other variables. Emphasis is placed upon the application of all types of measurement techniques to individuals prior to, during, and after physical education training.—*L. A. Pennington* (U. S. Naval Reserve).

1911. Cuthbert, N. L., & Denslow, J. S. Electrode efficiency and subject positioning in electromyography. *Proc. Soc. exp. Biol., N. Y.*, 1945, 58, 191-193.—Four kinds of electrodes were tested to

determine their relative efficiency in electromyography. "Electrodes with more contact surface than the core of a concentric but less than the bare shaft are most effective in recording muscle action potentials." Certain precautions are necessary when using two electrodes in close proximity because of their influence on each other. Also, errors may arise from improper positioning of the part of the subject's body under investigation. It is evident, therefore, that "reports dealing with electromyograms should describe the type and placement of electrodes and positioning of the subject."—C. P. Stone (N. Y. State Psychiat. Inst. & Hosp.).

1912. Flanders, S. E. Is caste differentiation in ants a function of the rate of egg deposition? *Science*, 1945, 101, 245-246.—The hypothesis is advanced that rate of egg deposition (which affects the nutrient content of the egg) determines caste differentiation. The males and queens will be produced when the rate is high, while the sterile female castes and associated anomalies will be produced when the rate is low.—F. A. Mote (Connecticut).

1913. Gutiérrez-Noriega, C. Acción de coca sobre la actividad mental de sujetos habitados. (Action of coca on the mental activity of addicts.) *Rev. Med. exp.*, 1944, No. 1.—[Abstracted review; original not seen.] Of 25 coca addicts studied, 20 were delinquents; dosage averaged from 50 to 100 grams daily. Mild intoxication resulted in disturbances of sensory functions, notably affecting acuity and stimulating fantasy. Hallucinatory phenomena were produced in more extreme cases. Obsessive and autistic thinking was common, and some delusive effects occurred. There was a general similarity to cocaineism, but onset and crisis were slower and lighter.—H. D. Spoerl (Jeffersonville, Vt.).

1914. Lecomte du Noüy, P. Physiological time. *Proc. Amer. phil. Soc.*, 1944, 87, 435-437.—The rate of healing of wounds may be taken as an index of the passage of physiological time. In a child of 10, the rate is about 5 times its value in a man of 60. It is argued that children and adults live in different temporal worlds, such that 10 minutes for the child is equivalent to 50 minutes for the older man. Educators should not attempt to sustain the attention of a child for more than a few minutes at a time, but should take account of the vividness of brief experiences in childhood.—L. A. Riggs (Brown).

1915. Lindsay, J. R., Morgan, R. H., & Wepman, J. M. The cricopharyngeus muscle in esophageal speech. *Laryngoscope*, St. Louis, 1944, 54, 55-65.—Roentgenograms of the action of the cricopharyngeus muscle are described in relation to the training of laryngectomized patients to use esophageal speech as a means of communication.—A. C. Hoffman (Tufts).

1916. Matthews, B. H. C. Human limits in flight. *Nature*, Lond., 1944, 153, 698-702.—The limits set by the efficiency of the pilot may often be of even greater importance than that of the aircraft. Blurred vision or even momentary blindness may occur when turning at high speeds—a warning that the blood pressure in the head is abnormally low. A crouched posture or a prone position may, within limits, reduce this effect of centrifugal force on the pilot. The effects of high altitude flying are due to

the lowering of atmospheric pressure. As the resulting anoxemia comes on, gross errors are made, muscular control is impaired, and judgment is lost despite a feeling of euphoria. Severe pain and even unconsciousness may result from the unequal pressures in the blood, middle ear, sinuses, and intestines: "the human safety limit in height is some 10-16,000 ft. breathing air and 40-42,000 ft. breathing oxygen; heights much in excess of the latter are only achieved by enclosing the pilot in an artificial atmosphere."—A. C. Hoffman (Tufts).

1917. Meyer, B. J., & Meyer, R. K. The effect of light on maturation and the estrous cycle of the cotton rat, *Sigmodon hispidus hispidus*. *Endocrinology*, 1944, 34, 276-281.—A review of the pertinent literature is followed by an experiment in which 16 rats were exposed to constant illumination from birth to 50 days, at which time the animals were autopsied. Exposure to constant light seemed to have little effect on the immature cotton rat, although complete absence of light caused definite retardation of development in the reproductive tract and maturation. A second experiment, designed to show the effect of constant light on the estrous cycle of the adult cotton rat, included 9 female rats, all over 100 days. Five were subjected to continuous light and 4 to continuous darkness for 72 days, with vaginal smears taken over the last 58 days. The groups were then interchanged for 45 days, and vaginal smears were taken over the last 31 days. The results showed no significant differences between length of vaginal estrous or diestrous of animals kept in light and of those kept in darkness. The fact that the estrous cycles of the experimental animals were shorter leads the authors to suggest that ordinary laboratory environmental disturbances have a definite effect on the estrous cycle of the cotton rat.—D. Schneider (Wisconsin).

1918. Morlan, G. K. How to influence yourself. East Chatham, N. Y.: Berkshire Press, 1944. Pp. viii + 237. \$2.50.—This volume is a nontechnical presentation of "the practical, scientific knowledge on the three major emotions of fear, anger and sex." Rules are given for applying the knowledge to everyday problems.—S. B. Williams (U. S. Naval Reserve).

1919. Parsons, C. T. Observations in Cuba on insect mimicry and warning coloration. *Psyche*, Camb., Mass., 1940, 47, 1-7.—Lizards were observed not to eat otherwise edible insects whose coloration ('warning coloration') was similar ('mimicry') to that of inedible insects.—A. C. Hoffman (Tufts).

1920. Perlman, H. B., & Case, T. J. Mechanisms of ocular movement in man. *Arch. Otolaryng.*, Chicago, 1944, 40, 457-467.—The interdependent functions of the neural mechanisms controlling the voluntary (frontal cortex), reflex optic (occipital cortex activated by a retinal image), and reflex vestibular (activated by the labyrinthine end organs) movements of the eyes are described in both the normal and abnormal subject. In an appendix are presented 37 electroculograms of lateral ocular movements (rapid alteration between two objects at a visual angle of about 12°) obtained from both normal and abnormal subjects, with a discussion of each case.—A. C. Hoffman (Tufts).

1921. Richna, L. W., Ashe, W. F., & others. The upper limits of environmental heat and humidity tolerated by acclimatized men working in hot environments. *J. industr. Hyg.*, 1945, 27, 59-84.

1922. Ring, J. R. The estrogen-progesterone induction of sexual receptivity in the spayed female mouse. *Endocrinology*, 1944, 34, 269-275.—Results of experiments using 150 spayed female mice indicate that estrogen followed by progesterone is superior to the injection of estrogen alone in producing heat in the spayed mouse and that the mating behavior is more normal than that produced by estrogen alone. "The optimum amount of progesterone is 0.05 mg. and the optimum time interval is 48 hours." It is suggested that estrous in the normal mouse is the result of progesterone action in the estrogen-conditioned animal.—D. Schneider (Wisconsin).

1923. Rothe, G. M., McDonald, J. B., & Sheard, C. The effect of smoking cigarettes and of intravenous administration of nicotine on the electrocardiogram, basal metabolic rate, cutaneous temperature, blood pressure and pulse rate of normal persons. *J. Amer. med. Ass.*, 1944, 125, 761-767.—Sixty-six observations were made on 6 subjects under varied conditions to ascertain the effect of cigarette smoking on body circulation and other symptoms. Standard cigarettes, French ashless, and corn silk cigarettes were used. Results indicate a rise in cutaneous temperature of the extremities, increase in basal metabolism rate, and changes in electrocardiograph tracing after the smoking of two standard cigarettes. These changes were not present after the smoking of corn silk cigarettes used as controls. Intravenous injection of nicotine showed similar changes. Increases in blood pressure and pulse rate after smoking standard cigarettes or after 2 mg. injection of nicotine were also noted.—D. Schneider (Wisconsin).

1924. Schmidt, C. F. Respiration. *Annu. Rev. Physiol.*, 1945, 7, 231-274.—Recent literature on the subject is reviewed. 206-item bibliography.—W. S. Hunter (Brown).

1925. Schneirla, T. C. Studies on the army-ant behavior pattern.—Nomadism in the swarm-raider *Eciton burchelli*. *Proc. Amer. phil. Soc.*, 1944, 87, 438-457.—The internal condition of the colony, rather than scarcity of prey in the environs, appears to be the factor determining the presence or absence of nomadic movement. This conclusion, derived originally from observation of the column-raiding *Eciton hamatum*, is now confirmed by data on the swarm-raiding *Eciton burchelli*, and may well apply to the *Ecitons* as a group. 25-item bibliography.—L. A. Riggs (Brown).

1926. Solandt, D. Y. Muscle. *Annu. Rev. Physiol.*, 1945, 7, 275-304.—This review of recent literature covers not only muscle in general but also the myoneural junction and the physiology of denervated muscle. 169-item bibliography.—W. S. Hunter (Brown).

1927. Spiegel, E. A., & Scala, N. P. Vertical nystagmus produced by peripheral labyrinthine lesions. *Arch. Otolaryng., Chicago*, 1944, 40, 160-163.—Vertical nystagmus is usually considered to be

a clinical sign of lesions in the central nuclei and pathways of the vestibular system. The present experimenters believe it may also appear due to peripheral labyrinthine lesions. They describe the effects of puncturing the round window of the inner ear or of injecting cocaine into the tympanic cavity of cats. "The mechanism of these phenomena possibly is that of a release of semi-circular canal receptors from a dampening influence normally originating in the maculae, through partial paralysis of the latter."—A. C. Hoffman (Tufts).

1928. Thorndike, E. L. Heredity and environment. *Eugen. News*, 1944, 29, 39-45.—The author comments on "the relative shares of heredity and environment in determining what man as a species becomes and what individual men and women become." Unsuitable environment can distort or impede development of genes to almost any extent, determine which of the genes' capacities develop, how they develop and how far they develop, but cannot, in the course of nature, make human minds and lives out of nonhuman genes. Human genes are not a fixed entity but produce men of very "different heights, intellects, types of blood," etc. apart from environmental influences. They remain the same irrespective of his cultural and geographic habitat. In recent decades, at least, little or no adaptation to the production of civilization has accrued through additions to the genes. The genes provide "no direct and primary responses to any mental images, ideas of concrete things or judgments about them." Intellectual powers, that turn manipulative play into constructive techniques and create meaningful speech, and all unforced mental activity going on under man's control are the "great and distinctive gifts (of genes) to man," but ideas of life, death, liberty, tool using activities, and an elaborate communicative speech are not necessary and direct results of the genes. Differences among human individuals are not explained by any fixed allotment of influence to genes and environment. Evidence of the relative influence of heredity and environment in determination of intelligence is reviewed, and faith in the relatively early discovery of similar knowledge of causation of differences in other human traits is expressed.—M. V. Louden (Pittsburgh).

1929. Wallen, R. Food aversions of normal and neurotic males. *J. abnorm. soc. Psychol.*, 1945, 40, 77-81.—Neurotic recruits reported a significantly larger number of food aversions than did normal recruits, whether questioned orally or with printed questionnaires. Eleven of the 20 foods mentioned showed significant differentiation by both methods. Neurotics have more unpleasant or disgusting associations to disliked foods. A check list of such dislikes might be a useful indirect indicator of maladjustment.—C. M. Harsh (Nebraska).

[See also abstracts 1843, 1852, 1855, 1869, 1870, 1871, 1875, 1883, 1886, 1931, 1936, 1963, 2013, 2071, 2072, 2079.]

PSYCHOANALYSIS, DREAMS, HYPNOSIS

1930. Bendit, L. J. Paranormal cognition; its place in human psychology. London: Faber & Faber, 1944. Pp. 79. 5s.

1931. Bitterman, M. E., & Marcuse, F. L. Autonomic response in posthypnotic amnesia. *Bull. Canad. Psychol. Ass.*, 1945, 5, 31-32.—Abstract.

1932. Foulkes, S. H., & Lewis, E. Group analysis; a study in the treatment of groups on psychoanalytic lines. *Brit. J. med. Psychol.*, 1944, 20, 175-184.—Four groups are described, two of men, two of women. The numbers attending varied from 5 to 10 people at a time. A wide range of themes came up for discussion, such as fear of becoming insane, street anxiety, birth, babies, food, education, religion, hypochondriacal manifestations, etc. The therapeutic results were very encouraging. A potent agent in itself, group therapy is said to be of great use in combination with individual psychotherapy of almost any type and extent.—E. R. Hilgard (Stanford).

1933. Humphrey, B. M. ESP and intelligence. *J. Parapsychol.*, 1945, 9, 7-10.—The data from a number of studies are examined in terms of the relation between ESP ability and measures of intelligence. "The two significant correlation coefficients found in this study suggest that some small but positive relation between ESP ability and general intelligence exists. The amount of relationship between these two test scores is certainly not large enough for predictive purposes. Nor is the evidence at hand conclusive enough to justify at this stage any speculations as to the possible meaning of such a correlation."—F. W. Finger (Virginia).

1934. Lundholm, H. Post-mortem on a printer's error. *Character & Pers.*, 1944, 13, 22-29.—The article is concerned with a printer's error which had some international significance and which might be interpreted in terms of Freud's unconscious wish.—M. O. Wilson (Oklahoma).

1935. Money-Kyrle, R. E. Towards a common aim—a psycho-analytical contribution to ethics. *Brit. J. med. Psychol.*, 1944, 20, 105-117.—The problem of ends to be sought has been variously formulated by metaphysicians, theologians, and psychologists. The most nearly satisfactory formulation of the problem is "What does the normal individual feel he ought to seek?" By characterizing abnormal moral attitudes, the existence of such a thing as normal morality is postulated. Presumably the diffusion of analytic insight will help in detecting pathological leaders; under these circumstances national ideologies leading to extreme forms of disagreement are less likely to persist.—E. R. Hilgard (Stanford).

[See also abstracts 1942, 1947, 1967.]

FUNCTIONAL DISORDERS

1936. Allan, W., Herndon, C. N., & Dudley, F. C. Some examples of the inheritance of mental deficiency: apparently sex-linked idiocy and microcephaly. *Amer. J. ment. Def.*, 1944, 48, 325-334.—Two original pedigrees are presented. In the first family, mental deficiency and muscular weakness with moderate atrophy are the two outstanding features. All affected individuals observed were males. The females were the carriers. Psychological examinations were not given, but it was ap-

parent that most of the affected individuals would be classified as idiots. "Examination of the pedigree shows that idiocy in this family may be inherited by either sex-linked, recessive or by dominant sex-limited transmission." In the second family presented, microcephalic idiots have appeared in different lines in three successive generations. There was no evidence of consanguinity, and none of the three mothers of the microcephalics had been exposed to X-ray or radium prior to the birth of the defective child.—S. Whiteside (Cincinnati Public Schools).

1937. Anderson, C. On certain conscious and unconscious homosexual responses to warfare. *Brit. J. med. Psychol.*, 1944, 20, 161-174.—Roughly 4% (209 of 5000 inpatients) admitted to the Wharncliffe Neurosis Centre were conscious inverters. Of these 171 were predominantly passive, 38 predominantly active. Latent homosexuality was inferred for about an equal number of patients. The relationships between homosexuality and resulting neurotic disorders are discussed.—E. R. Hilgard (Stanford).

1938. Atkinson, M. Tinnitus aurium; observations on its nature and control. *Ann. Otol., etc., St. Louis*, 1944, 53, 742-751.—The author supports the opinion that tinnitus is of the same category as the paresthesias of other specific neural systems—is like, e.g., the 'pins-and-needles' or constant burning sensations from damaged cutaneous nerves. Experimental test of a therapeutic procedure suggested by this analogy is described.—A. C. Hoffman (Tufts).

1939. Benda, C. E. The familial imbecile or oligo-encephaly as a morbid entity. *Amer. J. ment. Def.*, 1944, 49, 32-42.—An anatomical analysis was made of 20 familial cases (mental age ranging between 4 and 10 years) with the primary purpose of discovering anomalies of development. Observations on the spinal cord of the oligo-encephalic group were compared with other groups of mental deficiency, especially with findings in birth-injured children, which showed normal structures as far as fetal development is concerned. In 14 cases where the spinal cord was available for microscopic study, such abnormalities were found as a smaller cord, marked asymmetry of the anterior and posterior horns, obliteration or absence of the central canal, hypoplastic white fiber bundles, a cleft in place of the posterior septum, and true malformations of the gray matter. A greater variety of anomalies of the brain was found. The writer feels that these new cases add weight to the previously collected material, i.e. that we are dealing, in this type of amentia, with a morbid entity.—S. Whiteside (Cincinnati Public Schools).

1940. Benda, C. E. Clinical aspects of so-called mongoloid imbecility. *J. nerv. ment. Dis.*, 1945, 101, 384-386.—Abstract and discussion.

1941. Ewalt, J. R. Psychosomatic problems. *J. Amer. med. Ass.*, 1944, 126, 150-153.—The psychosomatic problems are divided into two groups. The first group contains patients who exhibit symptoms in one of the body systems, although there is no evidence of somatic pathological change.

This type includes the psychoneuroses and the simple anxieties. The second group contains patients who show similar symptoms, but in whom are found "definite structural lesions in which the psychogenic factors are found to play an important etiologic role." A brief review of the literature on the psychological aspects of gastrointestinal lesions, hypertension, and heart disease is presented.—*D. Schneider* (Wisconsin).

1942. Finesinger, J. E., Meigs, J. V., & Sulko-witch, H. W. Clinical, psychiatric and psycho-analytic study of a case of male pseudohermaphroditism. *Amer. J. Obstet. Gynec.*, 1942, 44, 310-317.—Pseudohermaphroditism is a condition in which the sex glands are entirely male or entirely female while the external sex characteristics are partly or wholly those of the opposite sex. Apparently this is the first case of verified (operation) male pseudohermaphroditism studied psychoanalytically. The patient was a nursemaid, aged 17, structurally predominantly a male; endocrinologically, a male with cryptorchidism. She was brought up as a girl, had feminine interests, considered herself and was considered the equal of her girl friends. She was an outgoing person, IQ 74. Her early psychosexual development was typically feminine. The presumptive evidence from this study is that factors other than anatomical and glandular play a predominant role in emotional and psychosexual development. Their nature is not clear, but in this case environment and situation played the chief part.—*M. E. Morse* (Baltimore, Md.).

1943. Greene, R. A. Mental deficiency. *J. nerv. ment. Dis.*, 1945, 101, 382-384.—Abstract and discussion.

1944. Hauptmann, A. Studies of finger capillaries in neurosis, epilepsy and migraine. *J. nerv. ment. Dis.*, 1945, 101, 387-389.—Abstract and discussion.

1945. Hill, J. M., & Hildreth, H. M. Hidden dementia praecox. *Nav. med. Bull., Wash.*, 1944, 43, 483-489.—Five cases of hidden dementia praecox of Naval personnel are discussed. These cases differ from ordinary dementia praecox in that the implicit mental condition of the patient becomes well advanced before readily observable symptoms are noticeable. Such cases are dangerous in military service because they may not be noticed until disastrous results have occurred in some military operation. The most dominate symptom seemed to be auditory hallucinations, consisting mainly of voices directing the individual's behavior.—*G. W. Knox* (U. S. Naval Reserve).

1946. Ironside, R., & Batchelor, I. R. C. The ocular manifestations of hysteria in relation to flying. *Brit. J. Ophthal.*, 1945, 29, 88-98.—Forty cases of ocular manifestation of hysteria appeared over a 3-year period of regular neuropsychiatric examination of air crewmen. The symptoms found were blurred vision, photophobia, diplopia, night blindness, hallucinations, intermittent visual failure combined with amnesia, deficient stereopsis, the tendency to look past an object which the subject attempted to fixate, intermittent loss of vision in one eye, involuntary movement of one eye, jumbling of print when the subject attempted to read, and fail-

ing day vision. All of these symptoms were out of proportion to any related organic ocular disability. The symptoms of each subject were closely related to the performance duties of that individual. Night fliers, for example, were more subject to night blindness, while day fliers more often developed failing day vision. Treatment involved altering the environment and duties of each individual in accordance with his particular symptoms. Generally the subjects were not able to resume full flying duties but were restricted to limited duties.—*G. W. Knox* (U. S. Naval Reserve).

1947. Krapf, E. E. Accidentes y operaciones como expresión de tendencias auto-destructivas. (Accidents and operations expressing self-destructive tendencies.) *Rev. Psiquiat. Crim., B. Aires*, 1944, 9, 145-150.—Besides psychoanalytical and psycho-technical evidences of special motivation underlying personal disasters, further descriptive items come to light in a case presented by the author. The patient, a ship's doctor, had managed to need a large number of general anesthetics in a short time for a series of surgical operations necessitated by accidents and diseases perhaps unconsciously motivated. He viewed his own physical symptomatology in a remarkably detached and objective manner.—*H. D. Spoerl* (Jeffersonville, Vt.).

1948. Menninger, K. The abuse of rest in psychiatry. *J. Amer. med. Ass.*, 1944, 125, 1087-1092.—Treatment of psychiatric conditions by rest cure is shown to be abusive in that it does not alleviate the underlying causes of maladjustment even though it may temporarily relieve the fatigue symptoms so frequently present. Overexertion of all kinds should be looked upon as symptomatic of psychiatric illness rather than causative. The importance of teaching individuals how to work and play as well as rest is pointed out. Modern psychiatry involves the directing rather than the blocking of the available energy of the psychiatric patient. The aid offered by rest in certain types of cases is indicated.—*D. Schneider* (Wisconsin).

1949. Meyer, A. Revaluation of Benjamin Rush. *Amer. J. Psychiat.*, 1945, 101, 433-442.

1950. Miller, R. B. Corneal anesthesia in hysteria. *Nav. med. Bull., Wash.*, 1945, 44, 749-751.—Of 600 men examined routinely, 19 were diagnosed as hysteric. Of these 19, 17 had bilateral corneal anesthesia. Of another group of 50 men diagnosed as hysteric, 47 also had bilateral corneal anesthesia. Since only a small per cent of those mentally healthy showed this condition, it is concluded that bilateral corneal anesthesia must be considered an important and virtually pathognomonic sign of hysteria.—*G. W. Knox* (U. S. Naval Reserve).

1951. Molholm, H. B. Association between red-green color blindness and some cases of asthma and hay fever. *J. Allergy*, 1944, 15, 120-124.—The fact that the incidence of hay fever and asthma is about twice as great among boys as among girls suggests that one of the influences in some cases is a sex-linked recessive factor. Among a group of 165 male patients with asthma and 192 with hay fever examined by the Ishihara test, the incidence of red-green blindness was 8.4%. In a group of unselected

males, it was about 4%. This relationship between red-green blindness and asthma and hay fever in boys strengthens the theory that some cases of asthma and hay fever depend in part on a sex-linked recessive factor.—*M. E. Morse* (Baltimore, Md.).

1952. Ordahl, G., Keyt, N. L., & Wright, C. The social competence of high-grade mental defectives determined by self-report. *Amer. J. ment. Def.*, 1944, 48, 367-373.—The Vineland Social Maturity Scale was administered to institution workers who had been committed as feeble-minded but had fitted into the institution program to become contributing members of that particular society. The patients' self-report was always checked with the cottage attendant. When credited with self-given information on social competence before commitment, 27% of the group scored above SQ 80. It was concluded that these scores were given by the patient when the items were performed or tried, regardless of success. The mean social age of the group after rescoring the examinations was 1 year 8 months above the mean mental age, but the mean SQ was lower than the mean IQ. Institutionalized men excelled in "socialization" and "occupation," while institutionalized women excelled in "self-help."—*S. Whiteside* (Cincinnati Public Schools).

1953. Pratt, D. Persistence of symptoms in the psychoneurotic ex-soldier. *J. nerv. ment. Dis.*, 1945, 101, 322-329.—Short questionnaires were sent to 256 psychoneurotic soldiers who had been discharged for about 5 months on the average. Of the 142 cases replying, 86 had anxiety neuroses; the rest were hysterics, hypochondriacs, neurasthenics, or depressed. About two thirds of these ex-soldiers reported that their symptoms were unimproved. It is suggested that the symptoms persist because continued illness justifies the ex-soldier's abandonment of his comrades and serves as a punishment to allay his guilt towards his army group.—*L. B. Heathers* (Smith).

1954. Rees, J. R. The shaping of psychiatry by war. New York: Norton, 1945. Pp. 158. \$2.75.—This book contains the 1944 Salmon Memorial Lectures. It is divided into three chapters, The Frontiers Extend, Opportunities Emerge, and The Way Ahead, and an appendix, The Tasks of Psychiatry. It presents a review of psychiatry in relation to World War II, describing the original status of psychiatry, its progressive recognition, development, and expanding applications, and its specific and general contributions not only to the war effort but to an understanding of peacetime problems as well.—*M. H. Erickson* (Eloise Hospital).

1955. Roberts, D. R., & Torkelson, E. H. Preparing the mind for battle. *Infantry J.*, 1945, 36, 34-36.—The following procedures tend to minimize the numbers who succumb to nervous exhaustion: developing self-confidence by thorough training in weapons by teaching men to understand their personal battle reactions; fostering team spirit; avoiding excessive fatigue; training replacements carefully; segregating immediately any severe cases of nervous exhaustion; developing a high degree of physical hardening; maintaining high standards of self-discipline on the part of leaders; and rewarding

and punishing quickly and fairly. It is noted that the percentages of casualties from nervous exhaustion differ radically from one regiment to another, and it is the contention of the authors that most of the difference is attributable to the factors listed above.—*N. R. Bartlett* (U. S. Naval Reserve).

1956. Schrader, P. J., & Robinson, M. F. An evaluation of prefrontal lobotomy through ward behavior. *J. abnorm. soc. Psychol.*, 1945, 40, 61-69.—Behavior changes as a result of prefrontal lobotomy of 16 chronic schizophrenic patients are evaluated by use of the Gardner Behavior Chart of ward behavior during preoperative and postoperative periods. The patients had averaged 7 years of hospitalization. Gardner indices reveal wide differences among patients in their response to prefrontal lobotomy, but for the group as a whole the operation resulted in marked improvement of behavior. The greatest improvement was in 'sociability' and 'attention to personal appearance.' Four sample case histories illustrate, among other things, the effectiveness of the operation where insulin or metrazol treatment had failed to help.—*C. M. Harsh* (Nebraska).

1957. Shryock, R. H. The psychiatry of Benjamin Rush. *Amer. J. Psychiat.*, 1945, 101, 429-432.

1958. Silverman, D., & Rosanoff, W. R. Electroencephalographic and neurological studies of homosexuals. *J. nerv. ment. Dis.*, 1945, 101, 311-321.—"Fifty-five homosexuals were studied clinically and electro-encephalographically. A high incidence of histories and neurological signs suggestive of cerebral lesions were found as well as neuropathic taint in the family histories. Pathological or borderline variant EEGs were present in no less than 75%. The following conclusion seems warranted: In the 55 cases studied, an inherited or early acquired abnormality of the central nervous system played a contributory role in the development of homosexuality."—*L. B. Heathers* (Smith).

1959. Stengel, E. Air-raid phobia. *Brit. J. med. Psychol.*, 1944, 20, 135-143.—"The symptom of air-raid phobia has been described and demonstrated in three cases, two of which were ex-soldiers. In all three cases the air-raid phobia had developed from a mild peace-time agoraphobia and claustrophobia."—*E. R. Hølgard* (Stanford).

1960. Sutherland, R. L. Community planning for mental casualties. *Tex. Person Rev.*, 1944, 3, 49-51.—The author indicates frequent errors committed in setting up community counseling services, outlines steps that should be taken, and supplies a short list of books and pamphlets for the local library.—*G. S. Speer* (Central YMCA College).

1961. Tavares Bastos, A. O serviço de psicologia da Colônia Gustavo Riedel. (Psychological service at Gustavo Riedel Colony.) *An. Colôn. Gustavo Riedel*, 1942, 5, No. 5.—A brief list is presented of psychological apparatus and testing materials acquired by this mental hospital since 1926, with an outline of the present scope of psychological activity.—*H. D. Spoerl* (Jeffersonville, Vt.).

1962. Teicher, J. D. Experiences with group psychotherapy. *Nav. med. Bull.*, Wash., 1945, 44, 753-755.—Treatment of combat fatigue cases at a

training station dispensary and at a Naval hospital is discussed. Because of the large number of cases, group treatment was found advantageous. The cases were of two major types, which were segregated and treated differently. Cases in group I (showing anxiety symptoms) were given simplified lectures on the natural effect of combat stress on the nervous system and the ability of the nervous system to recover after the combat has ceased. Cases in group II (showing hostility and resentment) were allowed group mental catharsis under guidance of an instructor. Each patient was allowed all the time he wanted freely to describe his resentments. The instructor would generally agree with the unfairness presented and, when possible, would point out the cause of the unfairness as an imperfect adjustment during the confusion of war. The result was a more logical, less emotional consideration of the injustices.—G. W. Knox (U. S. Naval Reserve).

1963. Wagner, J. R., & Elvehjem, C. A. A study of canine hysteria produced by feeding certain baked dog foods and wheat gluten flour. *J. Nutrit.*, 1944, 28, 431-441.—See *Biol. Abstr.* 19: 6319.

1964. Wolberg, L. R. Goals and objectives in psychotherapy. *N. Y. St. J. Med.*, 1944, 44, 1792-1796.—If psychotherapeutic aims fall short of adequate goals, relapse of illness is almost inevitable. Symptomatic treatment does sometimes free the patient from excruciating distress and allow him to attain a more useful, although restricted life. When the choice lies between the suffering associated with crumbling defenses and the stability produced by their restoration, the latter is the lesser evil. Catering to neurotic drives is, however, the goal of some forms of psychotherapy. Traits and drives should not be classified either as assets or liabilities because some, although culturally condoned, may be at variance with the patient's cultural and biological interests. Some neurotic drives must be uprooted, although they are embedded in culturally approved attitudes and values. The best criteria of progress during treatment are improvement in interpersonal relationships, release from anxieties rooted in the past, and a healthy self-knowledge and self-regard.—M. E. Morse (Baltimore, Md.).

1965. Wolff, C. The hand of the mental defective. *Brit. J. med. Psychol.*, 1944, 20, 147-160.—After reviewing the characteristics of the hands of 122 feeble-minded patients, 347 imbeciles without mongolism, and 43 idiots, the conclusion is reached that the hand may be used as a possible guide to differential diagnosis. There are 6 tables listing the incidence of defects.—E. R. Hilgard (Stanford).

[See also abstracts 1860, 1874, 1877, 1907, 1929, 1930, 1969, 1970, 1979, 1980, 1983, 1985, 1986, 1988, 1993, 2001, 2005, 2011, 2014, 2017, 2020, 2033, 2039, 2041, 2047, 2054, 2062, 2066, 2078.]

PERSONALITY AND CHARACTER

1966. Balinsky, B. The multiple choice group Rorschach test as a means of screening applicants for jobs. *J. Psychol.*, 1945, 19, 203-208.—The multiple choice group Rorschach test was adminis-

tered to 100 persons referred to the Consultation Service associated with the United States Employment Service in New York City. Each individual was put in one of three categories (to be screened out, border-line, and not to be screened out) on the basis of a comprehensive social, work, and test performance record, and he was assigned to one of these same three categories on the basis of "poor" answers on the group Rorschach. "On the basis of the results obtained, it must be stated that the amplified version of the Multiple Choice Test was not found to be an adequate screening technique for use in the United States Employment Service."—R. B. Ammons (Iowa).

1967. Bertocci, P. A. The psychological self, the ego, and personality. *Psychol. Rev.*, 1945, 52, 91-99.—The psychological self may be conceived of as an enduring, unique, complex unity of knowing-wanting activities. This serves to unify diverse descriptions of the ego and to clarify the function of the ego in personality-organization. "The adoption of this self, as the agent ever organizing its activities in relatively stable personality patterns and evaluating its adjustments in the light of environmental demands, helps us (1) to understand the close functional relationship between ego, personality, and self, and (2) to explain the possibility of continuity, succession, and interaction within the personality-ego systems." 39-item bibliography.—M. A. Tinker (Minnesota).

1968. Benton, A. L. Rorschach performances of suspected malingerers. *J. abnorm. soc. Psychol.*, 1945, 40, 94-96.—It is suggested that malingerers may show a marked poverty of ideation in the Rorschach test, inconsistent with mental test scores, as a defense against revealing the falsity of physical complaints.—C. M. Harsh (Nebraska).

1969. Binder, H. Die klinische Bedeutung Rorschach'schen Versuchs. (Clinical meaning of the Rorschach test.) *Schweiz. Arch. Neurol. Psychiat.*, 1944, 53, 12-29.—The cause for the success of this test lies in the fact that it expresses, better than any other experimental method, the basic tendencies of modern psychology, especially its totalitarian aspects and the interweaving of intellectual and affective factors. It is the best intelligence test, showing type and special talents, and is free from educational and linguistic elements. Unrealized potentialities of the personality are demonstrated better than in actual function. In contrast to its development in many fields of normal psychology, the method is still in its infancy in psychopathology. Much of the work is unconvincing because it underestimates the difficulties inherent in this field. The greatest need at present is more abnormal material evaluated by Rorschach experts. The test has special practical importance in forensic psychiatry.—M. E. Morse (Baltimore, Md.).

1970. Binswanger, W. Über den Rorschach'schen Formdeuteversuch bei akuten Schizophrenien. (The Rorschach test in acute schizophrenia.) *Schweiz. Arch. Neurol. Psychiat.*, 1944, 53, 101-121.—Thirty-one cases were studied, which fall into two groups. The first shows confusion, poor contact, depression, anxiety, and inhibition approaching stupor. The patients, however, retain a hold on themselves and

try to rationalize their psychosis as an indefinite threat from within or without. During improvement the perception type expands and memory for the attack is good. The second group experiences a "storm from the outside" with motor excitement, increased ego-feeling, no contact, disconnected playfulness, and many sexual and abstract interpretations. During improvement there is contraction, with amnesia for the attack. The schizophrenic characteristics common to both groups are the peculiar speech, predominant self-reference, abstractions, concretization, numerous original answers, combinations and confabulations, and a childlike, affective identification.—*M. E. Morse* (Baltimore, Md.).

1971. Cattell, R. B. Interpretation of the twelve primary personality factors. *Character & Pers.*, 1944, 13, 55-91.—As a result of unitary trait research, the twelve factors, designated by bipolar titles, emerge in the following order of mean contribution to the variance of the whole population of personality variables: A, cyclothymia v. schizothymia; B, intelligence, general mental capacity v. mental defect; C, emotionally mature stable character v. demoralized general emotionality; D, hypersensitive, infantile, sthenic emotionality v. phlegmatic frustration tolerance; E, dominance (hypomania) v. submissiveness; F, surgency v. melancholic, cycloid desurgency; G, positive character integration v. immature, dependent character; H, charitable, adventurous rathymia v. obstructive, withdrawn schizothymia; I, sensitive, imaginative, anxious emotionality v. rigid, tough poise; J, neurasthenia v. vigorous, "obsessional determined" character; K, trained, socialized, cultured mind v. boorishness; and L, surgent cyclothymia v. paranoid schizothymia. Each one of these factors is broken down into numerous subdivisions of bipolarized traits. Suggestions for further research are given. The bibliography includes 58 titles.—*M. O. Wilson* (Oklahoma).

1972. Harrison, R., & Rotter, J. B. A note on the reliability of the Thematic Apperception Test. *J. abnorm. soc. Psychol.*, 1945, 40, 97-99.—Five of the Morgan and Murray pictures were projected on a screen for group testing of officer candidates, who were allowed 7 minutes to write each story. From the thematic stories, 70 candidates were rated on emotional maturity and stability by 2 independent examiners. Coefficients of contingency of .73 and .77 show reliability of ratings on either a 3-point or a 5-point scale.—*C. M. Harsh* (Nebraska).

1973. Holmes, S. J. The reproductive beginnings of altruism. *Psychol. Rev.*, 1945, 52, 109-112.—In the light of comparative psychology, genuine altruism may be regarded as a deep-seated trait resting upon basic instincts that go far down in the animal kingdom. With all social animals, altruism has a very real value in the struggle for existence. The care of parents for offspring represents the earliest form of overt altruism. Altruism is not derived from egoism, but the two are coeval and as old as life itself. Egoism and altruism have their roots in two life activities: preservation of the individual and perpetuation of the race. Thus certain features of man's altruism can be understood

properly only by following the long and singular course of its evolution.—*M. A. Tinker* (Minnesota).

1974. Kimble, G. A. Social influence on Rorschach records. *J. abnorm. soc. Psychol.*, 1945, 40, 89-93.—Rorschach tests were administered twice to 14 students, once in a laboratory and again in the social atmosphere of a cafeteria. In the social situation there was a striking increase of color responses, a decrease in the ratio between the number of movement responses and the color sum (E/B), and a very slight tendency toward the production of more whole responses. The results can be explained either as a tendency for good humor to produce more color responses, or as a tendency of introverts to become ambiequal in social situations. The need for testing under standard conditions is quite apparent.—*C. M. Harsh* (Nebraska).

1975. Kuhn, R. Über Rorschach's Psychologie und die psychologischen Grundlagen des Formdeutversuches. (Rorschach's psychology and the psychological bases of his test.) *Schweiz. Arch. Neurol. Psychiat.*, 1944, 53, 29-47.—Only persons capable of an esthetic attitude and a feeling for the secret and mysterious will find a world even in blots. Rorschach's earlier works showed his inclination toward the esthetic and irrational and a personal interest in motility. His psychological orientation progressed from content and form to correlations and an entity, and eventually to the magic and mystic and an increasing introversion. He derived his views almost entirely from experience, and the key to them is his method of working up the material and his creative and intuitive grasp of human nature. He found the meaning of his test in artists and normal gifted persons in general. The nature of intuition and the connections of the method with Gestalt psychology, Katz's "structure of the color world," and biographical and dream content are discussed. The test makes objective the subjective conclusions of clinical study and offers the only immediate contact with the subject's personal world. In almost all cases it gives a glimpse of what great authors and artists manifest in their productions.—*M. E. Morse* (Baltimore, Md.).

1976. Layard, J. Primitive kinship as mirrored in the psychological structure of modern man. *Brit. J. med. Psychol.*, 1944, 20, 118-134.—This is an attempt to combine Jungian concepts of personality structure with data afforded by a knowledge of primitive kinship systems. The kinship relationship is such that a fourfold table can be described, two classes being based on alternate generations on the father's side, two on alternate generations on the mother's side. Every member of the community can be assigned to one of the four sections of the table. Psychological characteristics are assigned the different kinship relationships in accordance with the four psychological functions of intuition, thinking, feeling, and sensation. Examples are given from the dreams of two women patients.—*E. R. Hilgard* (Stanford).

1977. Mohr, P. Die schwarze und sehr dunkle Tönung der Rorschach'schen Tafeln und ihre Bedeutung für den Versuch. (The black and very dark shading in the Rorschach pictures and their

meaning for the test.) *Schweis. Arch. Neurol. Psychiat.*, 1944, 53, 122-133.—Interpretations of form and especially of color (as more definite) are closely related to affectivity. If this is pleasant, interpretation is not inhibited; if unpleasant, the picture is poorly perceived and the answer is symbolic or complex. In a positive sense, black symbolizes unusualness, importance, unchangeableness, solemnity, the Deity, and authority in general. Negatively, it symbolizes renunciation, guilt, rebellion, punishment, and death. The primary authority is the father; the first sin, disobedience. Mohr's protocols show that subjects who have been in conflict with authority react to dark-colored Rorschach pictures with distaste or anxiety (e.g., X-ray, crown, anatomical answers), while those having no such conflicts react to the same pictures with answers denoting protection, hominess, or quietness.—*M. E. Morse* (Baltimore, Md.).

1978. Munroe, R., Lewinson, T. S., & Waehner, T. S. A comparison of three projective methods. *Character & Pers.*, 1944, 13, 1-21.—Methods referred to include the Rorschach test (Munroe large-scale form), graphological analysis (Lewinson), and an art technique (Waehner), which involved systematic appraisal of spontaneous drawings. Subjects were entering students at Sarah Lawrence. Results showed good agreement with each other and with clinical observations.—*M. O. Wilson* (Oklahoma).

1979. Schmidt, H. O., & Billingslea, F. Y. Test profiles as a diagnostic aid: the Bernreuter Inventory. *J. abnorm. soc. Psychol.*, 1945, 40, 70-76.—The clinical usefulness of Bernreuter Inventory scores was evaluated by comparing subscores of 95 normal soldiers with those of 329 soldiers psychiatrically classified as constitutional psychopaths or psychoneurotics. Aside from a difference between normals and psychoneurotics on the B4-D scale, the raw scores were not significantly differentiating. However, the profile of B1-N, B2-S, and B4-D scores, disregarding level of scores, was about 80% effective in differentiating deviates from normals. The profile does not reveal the type of maladjustment, but the sharpness of profile is somewhat related to extent of maladjustment.—*C. M. Harsh* (Nebraska).

1980. Tschudin, A. Chronische Schizophrenien bei Rorschach'schen Versuch. (Chronic schizophrenia and the Rorschach test.) *Schweis. Arch. Neurol. Psychiat.*, 1944, 53, 79-100.—In chronic schizophrenia, the test shows no specific changes in the averages or correlations of formal factors or in content, but the broader factors not immediately accessible to statistics give valuable indications. Symbolizations and self-recognition which mirror the contrasts and tragedy of schizophrenia are frequent. The three groups studied differed among themselves. Hebephrenics approach the normal most nearly. They form two subgroups: the first is self-oriented and contracted, with many anatomical and sex answers; the second, with little self-reference and with many object, color, and geographical answers. The outer world is vague. Although inexpressive, they are overwhelmed by anxiety and struggle against sinking into chaos. Chronic catatonics show the smallest number of answers, very poor form, confused sequence, little movement

and color, a dreary mood, and a destroyed world. If self-representation is lost and the outer world remains, there is increasing dearth of content. Paranoids can build up a world in the test which is related to their delusions, a destructive, aggressive, isolated, but not absurd world.—*M. E. Morse* (Baltimore, Md.).

1981. Weber, A. Der Rorschach'sche Formdeutversuch bei Kindern. (The Rorschach test as applied to children.) *Schweis. Arch. Neurol. Psychiat.*, 1944, 53, 47-61.—Weber reports his findings together with those of other Swiss investigators. Before puberty, the perception type shows a characteristic contraction, probably because of developing sexuality. It expands at puberty and then contracts again. The child's perception type is considerably more labile than the adult's, and the attitude toward the test plays a larger part. The special childish characteristics are a decrease in primary color answers, kinesthesia, and total answers; an increase in detail; perseveration; and inverse interpretations. Only tentative conclusions can be drawn as to the child's anlage because of environmental influences and momentary physical or emotional disturbances. The evolution and characteristics of color, form, and movement answers are discussed; also color shock, dark shock, and content. The method is as good an intelligence test for children as for adults, and it is also valuable in connection with school and other practical problems. A systematic large-scale application of the test to children who deviate from the normal in various ways is indicated.—*M. E. Morse* (Baltimore, Md.).

1982. Wekstein, L. A preliminary outline for a fantasy projection technique as a clinical instrument. *J. Psychol.*, 1945, 19, 341-346.—The test material consists of two qualitatively approximately equivalent sets of 10 pictures. Each picture gives an unstructured fantasy containing Disney-like figures of various somatypes, with widely varying bodily and facial expressions. Symbols consisting of both objects and situations are utilized, as are color and vagueness effects produced by representations of clouds, fog, and smoke. The subject is instructed to make up a fairy story concerning what is, was, and will be happening in each picture. The dreamlike aura appears to weaken the censor. Original responses, in combination with responses subsequently elicited by questioning, are analyzed as to identification, color reactions, emotional concomitants, forces of the milieu created, outcomes, and interactions.—*R. B. Ammons* (Iowa).

1983. Werner, H. Perceptual behavior of brain-injured, mentally defective children: an experimental study by means of the Rorschach technique. *Genet. Psychol. Monogr.*, 1945, 31, 51-110.—A comparison is made of the performance on the Rorschach of two mentally defective groups. In one group the mental deficiency was due to brain injury, while in the other the mental deficiency was not due to brain injury. Nineteen boys, matched on the basis of mental age and IQ, were included in each group. A number of significant differences between the groups were found. In terms of Rorschach categories, the brain injury cases gave fewer responses, more whole responses, more oligophrenic responses,

fewer tiny detailed responses, higher percentage of white space responses, fewer movement responses, more color responses, more good form responses, more responses containing human figures, fewer responses containing animal forms, and more 0-minus responses than did the mental defectives without brain injury. When the data are interpreted, the conclusion is drawn that the cases of mental deficiency resulting from brain injury, as compared with those without brain injury, exhibit the following characteristics: lack of integration of elements into more comprehensive configurations, forced responsiveness to sensory stimulation, lack of effective-motor control, lack of associational control, meticulous behavior, and pathological rigidity. 30-item bibliography.—*L. Long* (College of the City of New York).

1984. Wolfe, J. M. Social and moral relevants of the psychological and philosophical concepts of personality and individuality. *New Scholast.*, 1944, 18, 334-375.—The author traces the history of philosophical and religious notions regarding human nature, personality, and individuality, and finds that "the true notions of the meaning and significance of the terms person and personality were thus duly derived from the dogma of the incarnation. It was from the explanation of it that the philosophers, apologists, and theologians derived the true and adequate concept of person." Historical continuity is found in false concepts regarding personality held by William of Ockham, Luther, Calvin, Hobbes, Locke, Milton, Hume, Fichte, and contemporary materialists and psychologists. Modern educational theory and practice are also discussed.—*V. Nowlis* (Indiana).

1985. Yahn, M. Evolução da personalidade e as manifestações psicóticas endógenas. (Evolution of personality and endogenous psychotic manifestations.) *Rev. paul. Med.*, 1944, No. 4.—[Abstracted review; original not seen.] Personality development is portrayed as the co-ordinated growth of the somatic aspect (including the adjustive nervous system), the endocrine-vegetative system, and psychical activity as such. There are optimal periods of development when these phases are open to observation. Schizophrenic maladjustment belongs typically to the close of youth. It is suggested that this is because an older psychotic has a functionally more "finished" personality, wherefore his disturbance (if schizoid) is more likely to be paranoia or paraphrenia.—*H. D. Spoerl* (Jeffersonville, Vt.).

1986. Zolliker, A. Schwangerschaftsdepression und Rorschach'scher Formdeuteversuch. (Pregnancy depression and Rorschach's test.) *Schweiz. Arch. Neurol. Psychiat.*, 1944, 53, 62-78.—Ninety-five cases of depressions during pregnancy were examined, but no control series of normal women, pregnant or not, were available. In the whole group the number of answers was reduced, the perception type contracted, and anatomical answers referring to the pelvis much increased. A group of male gastric patients gave a comparable result, the anatomical answers centering on the digestive tract. An increase of anatomical references is characteristic of a psychogenic situation in which marked self-reference is recognizable clinically. In the present

series, it is impossible to say how specific this reaction is for the negative reaction to pregnancy. It is not an index of the severity of the depression, since in the clinically more severe cases the reaction was decreased or even absent, due to inability to master the situation psychologically. The other characteristics which distinguish the lighter from the deeper depressions of pregnancy could not be determined definitely.—*M. E. Morse* (Baltimore, Md.).

[See also abstracts 1853, 1882, 1988, 2013, 2017, 2034, 2038, 2040, 2065.]

GENERAL SOCIAL PROCESSES

(incl. Aesthetics)

1987. Allport, F. H., & Lepkin, M. Wartime rumors of waste and special privilege: why some people believe them. *J. abnorm. soc. Psychol.*, 1945, 40, 3-36.—A questionnaire concerning the degree of belief in 12 statements of current rumors was circulated to adults through children in 8 Syracuse schools. Attitudes toward rationing and wartime administration were also solicited. The 537 complete returns are analyzed to reveal possible factors associated with belief in rumors. Various statistical controls were tried to delimit the combined influence of several factors. The reasoning is presented in detailed research notes. The rumors were believed in one fourth of the cases. Belief was associated with previous hearing of the rumors, antirationing attitudes, suspicion of slackerism, and failure to read the Rumor Clinic column. Relationship to sex, age, or occupation is doubtful.—*C. M. Harsh* (Nebraska).

1988. Bacon, S. D. Inebriety, social integration, and marriage. *Mem. Sect. Alcohol Stud., Yale Univ.*, 1945, No. 2. Pp: 76.—See 19: 182; 1278.

1989. Brueckner, L. J. Factors conditioning the development of attitudes. *J. educ. Res.*, 1945, 38, 470-473.—In a study of attitudes of children of grades 4 to 12 toward a number of issues related to the war, the pupils were asked to indicate 'agreement,' 'disagreement,' or 'no opinion' on 40 issues ranging from international to local problems. On 26 of the issues, there was remarkable consistency in attitude at all grade levels. On the other hand, for example, the attitude toward the immigration of refugee groups became strikingly less favorable from grade 4 to grade 12, and the attitude toward the United States taking part in the trials and punishment of war criminals became increasingly favorable. The investigators were not able to discover the reasons for these changes in attitude by observation of the work of the school.—*M. Murphy* (Pennsylvania).

1990. Crespi, L. P. Public opinion toward conscientious objectors: II. Measurement of national approval-disapproval. *J. Psychol.*, 1945, 19, 209-250.—In March, 1944, an Opinion Thermometer designed to measure intensity of approval or disapproval of conscientious objectors was administered by the Princeton University Office of Public Opinion Research to a representative national sample of 1,199 persons: 74% expressed disapproval; 18.1% approval; and 7.8, no opinion. A mean of -52.6

was found on a scale of approval-disapproval ranging from +100 to -100, thus indicating substantial but not "crushing" disapproval. Factors associated with lower mean disapproval were college education, Middle Atlantic residence, urban residence, Republican party affiliation, and the absence of any relative in the armed forces. Factors associated with higher mean disapproval were grammar-school or no education; residence in Middle West, South or Far West; rural residence; Democratic party affiliation; and the presence of relatives in the armed forces. It is particularly to be noted that college-educated interviewees were less disapproving of CO's than those with less education and that there was no sex difference for the sample. (See 19: 189.)—R. B. Ammons (Iowa).

1991. Crespi, L. P. Public opinion toward conscientious objectors: III. Intensity of social rejection in stereotype and attitude. *J. Psychol.*, 1945, 19, 251-276.—A Social Rejection Thermometer ranging from 0° (acceptance as close relative in marriage) to 100° (conscientious objectors should be shot) was used to measure the individual attitudes and judgments of group attitudes of a representative sample of 300 persons in or near Trenton, N. J. A further question was asked as to personal and supposed public reaction to a particularly well-known conscientious objector, Lew Ayres. A majority of the public showed a friendly attitude toward CO's as individuals, with over one third showing no tendency whatever toward rejection. However, the prevailing conception of average public opinion toward CO's (stereotype) was complete social ostracism. National policies have been formed on the basis of this stereotype rather than on empirical studies of public opinion. It appeared that the major gain in tolerance came with secondary education, while the major gain in approval came with college education.—R. B. Ammons (Iowa).

1992. Crespi, L. P. Public opinion toward conscientious objectors: IV. Opinions on significant conscientious objector issues. *J. Psychol.*, 1945, 19, 277-310.—A representative sample of 300 persons in or near Trenton, N. J., were asked for their opinions on a number of important conscientious objector issues. Four fifths of the interviewees appeared to accept the principle of alternative service for CO's, and over three fourths indicated that the government should provide wages and a family allotment for CO's assigned to work camps, which compensation should be comparable to that in the armed forces. More postwar discrimination against CO's was anticipated in economic and political areas than in connection with social acceptance. Analysis shows more favorable attitude toward CO's with increasing educational levels and with younger age groups, but no significant sex or economic status differences.—R. B. Ammons (Iowa).

1993. Davis, D. B., Wolman, H. M., Berman, R. E., & Wright, J. E. Absence without leave: psychiatric study of 100 A.W.O.L. prisoners. *War Med.*, Chicago, 1945, 7, 147-151.—This is a study from the Richmond Army Air Base Hospital. Mental disorder (usually constitutional psychopathy) and mental deficiency were the main factors in 63%, with primary behavior disorders related to

marital, occupational, or military maladjustment in 37%. Of the total group, 25% were mentally defective, 19% borderline and 49% dull normal. Broken homes, subnormal living conditions, poor records in school, employment and the Army, anti-social traits, drunkenness, and difficulties in the officer-soldier relationship were characteristic. The explanation of their conduct which the prisoners gave was seldom the true cause; in fact, they usually did not recognize the real cause. Since 83% of the men went A.W.O.L. more than once, guardhouse sentences are not effective deterrents.—M. E. Morse (Baltimore, Md.).

1994. Eysenck, H. J. National differences in "sense of humor": three experimental and statistical studies. *Character & Pers.*, 1944, 13, 37-54.—Much of the literature is reviewed, and the results of original studies are presented. It is concluded that sense of humor among national groups is strikingly similar. No indisputably national differences were found in appreciation, judgment, or analysis of humor. 29-item bibliography.—M. O. Wilson (Oklahoma).

1995. Feibleman, J. K. The psychology of the artist. *J. Psychol.*, 1945, 19, 165-189.—The psychology of art expression rests upon facts and theories in both psychology and art, while the psychological process of art expression is the method whereby nature produces art through the utilization of the objective human perspective. The artist's inspiration "is a manufactured article, produced by the soul from the raw material of experience." The artistic process extends over both the conscious and the unconscious realms. Four active stages may be distinguished in the making of a work of art, so far as the psychological aspects of the situation are concerned: (a) the reception of the data, (b) the revision in the psyche, (c) the conscious reaction, and (d) the making of the object. In the psychology of artistic expression, logical form exists as a kind of structural framework. For the making of any work of art, there are (a) premises, (b) a method, (c) applications, and (d) a conclusion. "The artist has an important role to play in society. He himself lies directly in the path of the route which nature take to produce a work of art."—R. B. Ammons (Iowa).

1996. Gambaro, P. K. Analysis of Vineland Social Maturity Scale. *Amer. J. ment. Def.*, 1944, 48, 359-363.—Sixty-one girls and 286 boys were given the Vineland Social Maturity Scale, the 1937 Revision of the Stanford-Binet L or M by Terman and Merrill, and the Stanford Achievement Intermediate and Primary D reading tests. The socioeconomic status of the group was identical. Correlations between IQ and SQ are positive, but not all are statistically significant. Correlations between reading age and mental age are consistently low. When reading age and social age are correlated, the results are positive and statistically reliable. The only significant sex difference is in reading age. The girls appear to be one-half to one whole grade ahead of the boys.—S. Whiteside (Cincinnati Public Schools).

1997. Gaul, A. T. Experiments in housing vespine colonies, with notes on the homing and toleration instincts of certain species. *Psyche, Camb., Mass.*,

1941, 48, 16-19.—"Wasps returning from the fields invariably return directly to the home window. In many cases, however, they would fail to select the proper hive compartment. Even when there were two or more species in a hive, they would repeatedly enter the wrong compartment. . . . It thus seems that members of one species of *Dolichovespula* will tolerate guests of the same species, while they are actively hostile to the intruders of another species."—A. C. Hoffman (Tufts).

1998. Herakovits, M. J. On "racial" differences. *Science*, 1945, 101, 200.—In the United States, any amount of Negro blood classifies an individual as a Negro. It is obvious that "Negro" versus "white" distinctions are not racial but social. Thus, in studies of racial differences in innate traits, it is essential to a scientific approach to the problem that workers investigate groups belonging to different races and not make a case for racial differences where the distinction is one of degree rather than kind and is social rather than biological.—F. A. Mote (Connecticut).

1999. Hull, C. L. Moral values, behaviorism, and the world crisis. *Trans. N. Y. Acad. Sci.*, 1945, 7, 90-94.—A consideration of the methodology of science leads to the conclusion that "the so-called science of ethics, so far as ultimate ethical values are concerned, is a pseudo-science"; that is, characterizing an event as absolutely either good or bad falls outside the domain of science. But this implies no impossibility of developing a true science of moral behavior, including the moral judgment, "because this is concerned with events which may be predicted and publicly observed." Nor is it impossible to apply scientific method in "the determination of the most effective means of attaining values of all kinds, ethical or otherwise, as held by ourselves or others."—F. W. Finger (Virginia).

2000. Jóhannesson, A. Gesture origin of Indo-European languages. *Nature, Lond.*, 1944, 153, 171-172.—The author supports the theory that the origin of language was in part the result of imitation by the speech organs of the gestures of the body, especially the hands.—A. C. Hoffman (Tufts).

2001. Kaplan, O. J. Marriage of mental defectives. *Amer. J. ment. Def.*, 1944, 48, 379-384.—Information regarding 56 of the 67 paroled patients of the Sonoma State Home who married during 1941-1942 is given. The war has led to an appreciable increase in the number of such marriages, probably because of the increased incomes and opportunities for work among paroled patients and among the noninstitutionalized subnormals who so frequently marry them. Patients were sterilized before parole. 58.9% of the marriages were judged by the social worker as satisfactory as of June, 1943. More female than male patients married, and the female defectives showed a higher percentage of satisfactory adjustments. The imbeciles and morons were found to have a higher percentage of satisfactory marriages than the borderline and dull cases, possibly due to selective factors which operate in institutions for the mentally defective.—S. White-side (Cincinnati Public Schools).

2002. Kreinheder, W. R. The Army Orientation Program. *Milit. Rev., Ft Leavenworth*, 1944, 24,

33-35.—The Army Orientation Program strives to establish and maintain morale in all parts of the military service. The principal units are the following branches of the Morale Services Division: Research, Education, Information, and Orientation; these "furnish the tools with which orientation officers work and are the basis for the mental development of the individual." The Research branch conducts surveys to determine soldier attitudes on matters concerning morale; the Education branch provides off-duty study programs (both military and civilian subjects); the Information branch supervises distribution of current information (maps, guides to foreign countries, Army News Service, war information films, etc.); and the Orientation branch directs its activities towards giving every soldier a sense of personal mission in the part his unit is playing, whether in training, duty in an overseas theater, or in combat.—F. A. Mote (Connecticut).

2003. Marcuse, F. L. Attitudes and their relationships—a demonstrational technique. *Bull. Canad. Psychol. Ass.*, 1945, 5, 36-37.—Abstract.

2004. Moreno, J. L. Foundations of sociometry; an introduction. *Sociometry Monogr.*, 1944, No. 4. Pp. 35.—See 15: 3521.

2005. Rashkis, H. A. Notes on interviewing AWOL soldiers. *J. abnorm. soc. Psychol.*, 1945, 40, 100-101.—Over 150 soldiers were interviewed to determine causes of their going AWOL. The adaptable approach of the sergeant seemed to produce good rapport. AWOL is an escape from an adjustment problem, usually a 'domestic neurosis' of strong home attachment. Good morale can lessen the escape tendency.—C. M. Harsh (Nebraska).

2006. Riker, B. L. Comparison of attitude scales—a correction. *J. abnorm. soc. Psychol.*, 1945, 40, 102-103.—Corrections of statistical errors in an earlier article (see 18: 2193) reveal significant differences between mean responses on Thurstone scales, graphic self-ratings, and Intensity of Feeling self-rating scales of attitudes. The writer does not change his conclusions, contending that all three scales give essentially similar relative measurements of attitudes.—C. M. Harsh (Nebraska).

2007. Sewny, V. D. The social theory of James Mark Baldwin. New York: King's Crown Press, 1945. Pp. vi + 93. \$1.50.—The author describes the pioneer position of Baldwin in social psychology and sociology, his synthesis of current (1890-1914) biological, psychological, sociological, and philosophical concepts, and his dependence on Darwinian evolutionism and Hegelian idealism and dialectic. He discusses Baldwin's theory of the social origin of the self, which stressed the interdependence of individual and society, his emphasis on the importance of psychological factors in social theory, his explanation of socialization in terms of imitation, invention, language, and play, his treatment of social organization, social evolution, and institutions, his ideas regarding the nature and scope of sociology, his doctrine of genetic nodes as an early expression of emergent evolution, and the relation of his work to that of Tarde, Cooley, Mead, and others. His chief limitations and weaknesses are found in his theory of psychological recapitulation, his excessive

use of imitation and orderly evolutionary stages as explanatory concepts, his use of analogies, and in his difficult terminology, dogmatism, and overly rigid system. There is a bibliography of 18 books and 17 articles by Baldwin and 13 works dealing with his social theory.—V. Nowlis (Indiana).

2008. Smith, M. The psychology of the corporate act. *Psychol. Rev.*, 1945, 52, 100-108.—Corporate behavior is defined as "behavior of a plural number of members who are influenced by one another and who collaborate as a unit in actions with reference to the environment." Behavior of the social group as an example of social behavior related to but not identical with other forms of group behavior is analyzed in psychological language. The author attempts to bridge the gap between concepts of less integrated forms of social actions (unilateral social behavior, interaction, and unincorporated collective behavior) and completely integrated group behavior (corporate behavior).—M. A. Tinker (Minnesota).

2009. Taylor, W. S. A note on cultural determination of free drawings. *Character & Pers.*, 1944, 13, 30-36.—Students in an Indian college, who served as subjects, were required to draw freely within 4" x 6" rectangles figures with 19 straight and 6 curved lines. The results indicate the existence of cultural influences affecting drawings. There were not only differences between the Indian and the American students but also between the various cultural groups within India.—M. O. Wilson (Oklahoma).

2010. Waters, E. N. Report of the committee on literature about music. *Proc. Music Teach. nat. Ass.*, 1944, 493-505.—One section of the listing is headed "Psychology, Aesthetics, Physics."—P. R. Farnsworth (Stanford).

[See also abstracts 1837, 1845, 1849, 1893, 1912, 1925, 1928, 1935, 1952, 1954, 1955, 1960, 1974, 1976, 1984, 2012, 2015, 2016, 2021, 2040, 2056, 2079.]

CRIME AND DELINQUENCY

2011. Kerschbaumer, L. A patient's reaction to a "lunacy" charge. *J. nerv. ment. Dis.*, 1945, 101, 378-381.—Illustrating his point with a letter from a paranoid schizophrenic patient, the author deplores the continued use of such terms as "insanity" and "lunacy" by our courts.—L. B. Heathers (Smith).

2012. Miller, N. The social and familial study of juvenile delinquency. In Radzinowicz, L., & Turner, J. W. C., *Mental abnormality and crime*. London: Macmillan, Ltd., 1944. Pp. 216-227.—Factors making for delinquency may be divided into inborn (mental backwardness, moral backwardness, psychotic character formations) and acquired (injuries and infections of the central nervous system, gross environmental anomalies). The individual and society must be studied together, and field-force sociology aids in this.—M. R. Jones (U. S. Naval Reserve).

2013. Miller, E. The problem of birth-order and delinquency. In Radzinowicz, L., & Turner, J. W. C., *Mental abnormality and crime*. London:

Macmillan, Ltd., 1944. Pp. 227-239.—Brief reviews are presented of experimental studies on the relation between birth-order and physical characteristics, psychological characteristics, character and personality traits, behavior disorders, and crime and delinquency. The author concludes that "there is a suggestion that first children are more prone to deviate from the average than others, in traits involved in aberrant social behaviour."—M. R. Jones (U. S. Naval Reserve).

2014. Moloney, J. C. Escape. *Psychiatry*, 1945, 8, 9-11.—The frequent instances of escapes by convicts shortly to be released from prison and their easy recapture and consequent prolongation of their prison term are discussed briefly for their psychological significances as neurotic escapes into a freedom from reality.—M. H. Erickson (Eloise Hospital).

2015. Moreno, J. L. Group method and group psychotherapy. *Sociometry Monogr.*, 1944, No. 5. Pp. 104.—See 6: 2872, *Plan and Technique of Developing a Prison into a Socialized Community*.

2016. Overholser, W. Who are the juvenile delinquents? *J. soc. Hyg.*, 1944, 30, 304-308.—Statistics show that, at least in certain age groups, substantial increases have occurred in sex delinquency among girls, truancy, running away from home, and aggressive forms of larceny. This behavior is discussed in the light of gratification of needs created by lack of parental supervision, disharmony and insecurity in the home, adolescent development of aggressive and sex drives, and the general accentuation of tensions and instinctive drives during wartime. Although children may not be definitely informed, they sense what is going on, feel insecure and react by some form of aggression. The methods of coping with these difficulties are considered. Attention is called to the special situation in Washington, which is due to the rootlessness and turnover of the population.—M. E. Morse (Baltimore, Md.).

2017. Pearce, J. D. W. Physical and mental features of the juvenile delinquent. In Radzinowicz, L., & Turner, J. W. C., *Mental abnormality and crime*. London: Macmillan, Ltd., 1944. Pp. 208-216.—As a group, juvenile delinquents present more physical stigmata, are inferior in nutrition, have lower IQ's, are less well educated, reveal a quantitative defect in general temperamental endowment, and have less conscience than nondelinquent children. Defect in intelligence and in temperamental instability are associated. The delinquent has almost always experienced serious dissatisfactions due to inadequate human relationships within the family. Type of treatment and prognosis depend upon etiology.—M. R. Jones (U. S. Naval Reserve).

2018. Radzinowicz, L., & Turner, J. W. C. English studies in criminal science. Vol. II: *Mental abnormality and crime*. London: Macmillan, Ltd., 1944. Pp. xxiv + 316. \$3.75.—See 18: 3568; 19: 1302, 1547, 1551, 1552, 1701, 1764, 1765, 1766, 1770, 2012, 2013, 2017, 2019, 2070.

2019. Rudolf, G. de M. Reaction to military life and criminal behaviour. In Radzinowicz, L., & Turner, J. W. C., *Mental abnormality and crime*. London: Macmillan Ltd., 1944. Pp. 240-268.—Brief

discussions are given of reasons for enlisting, amnesias, fear reactions, and criminal acts in the armed forces, with anecdotal illustrations drawn from the author's experiences. An 8-page "list of offences in respect of military service" is appended.—*M. R. Jones* (U. S. Naval Reserve).

[See also abstracts 1968, 1993, 2005, 2062, 2070.]

INDUSTRIAL AND PERSONNEL PROBLEMS

2020. Babcock, L. Civilian adjustment of the veteran with an "NP" discharge. *Publ. Person. Rev.*, 1945, 6, 85-91.—Men and women discharged for psychiatric reasons fall into three broad groups: psychotics, psychopathic personalities, and psychoneurotics. The NP's form the largest of these three groups. About 70% of them are diagnosed as anxiety neurotics, and the second most common diagnosis is hysterical. All veterans will have to adjust to changes in authority, old home town, job, friends, etc. In addition to these, the NP's will face problems of increased sensitivity, "jumpiness," and various unintentionally unpleasant attitudes. The employer must be tolerant of this behavior and remember that the majority of cases will recover in time. He must be as considerate as if the NP were a physically wounded veteran, avoiding obnoxious personal questions, providing quiet working conditions without overload, and helping the NP develop confidence and a feeling of security. Above all he must remember that, although the NP may not have the aptitudes for fighting a war, this does not mean that he does not have the aptitudes for holding a job.—*H. F. Rothe* (Stevenson, Jordan & Harrison, Inc.).

2021. Baganz, C. N., Mearin, R. J., & Woods, W. A. Mental mechanisms and morale factors of Naval recruits in training. *Nav. med. Bull., Wash.*, 1944, 43, 1137-1140.—The author defines military morale as consisting of the mental mechanism by which the conscious efforts of all the men succeed in bringing victory at the lowest cost and in the shortest time. The most influential factors in determining morale are found to be: the solution of personal problems, a clear understanding of the military organization and its objective, and a clear understanding of one's own contribution as a part of this organization.—*G. W. Knox* (U. S. Naval Reserve).

2022. Bonnardel, R. Recherches expérimentales sur la prévention des accidents au moyen des méthodes psychotechniques. (Experimental studies on accident prevention by psychotechnical methods.) *Année psychol.*, 1942, 40, 84-93.—The 60 workers in an automobile factory who had had at least 3 accidents within 5 years were examined by means of a battery of psychological and psychomotor tests. It appeared that, in this specific situation, the principal cause of accidents was motor in-coordination and awkwardness. The possibility of decreasing the frequency of accidents by use of the battery in selection is discussed.—*F. W. Finger* (Virginia).

2023. Bramley, J. F. Improvements in motor car design as an aid to safer driving. *Practitioner*, 1945, 154, 214-220.—The modern car, due to its respon-

siveness and ease of control, is a remarkably safe machine. The qualities of design which make for safety are control, stability, and facilities for wide uninterrupted vision and glare reduction. The improvement of safety rests in minor refinements of present design. Changes are more necessary in the roads than in the vehicles.—*M. E. Morse* (Baltimore, Md.).

2024. Cory, H. A. Present wartime personnel problems relating to office workers. *Tex. Person. Rev.*, 1944, 3, 27-30.—The outstanding problems are lowered employment standards, inability of management to replace employees in accordance with their abilities, emotional tension or "war nerves," and adjustment to inadequate salaries.—*G. S. Speer* (Central YMCA College).

2025. Farmer, E. Accident-proneness on the road. *Practitioner*, 1945, 154, 221-226.—This article relates to drivers of commercial vehicles, which are the class most often involved in accidents. One of the best ways of avoiding accidents is to get a more efficient type of commercial driver. Present standards for their selection and training are low. The truck driver has a mental ability equal to that of an unskilled laborer. The mere act of driving does not call for high ability, but avoidance of accident situations requires comprehension, accurate and rapid reasoning, and quick choice of alternatives. All persons involved in accidents, whether adjudged negligent or not, should be tested for accident-proneness. The immediate postwar period will offer an excellent opportunity for radically raising standards for driving, since the supply of truck drivers will be larger than the demand.—*M. E. Morse* (Baltimore, Md.).

2026. Fite, H. H. Training supervisors in management analysis. *Publ. Person. Rev.*, 1945, 6, 92-98.—The Work Simplification Section of the U. S. Bureau of the Budget attacks the procedural problems of large organizations within that Bureau by equipping first-line supervision with the skills to analyze and improve procedures. The techniques taught are the use of (1) the Work Distribution Chart for analyzing division of labor, (2) the Process Chart for analyzing flow of work, and (3) the Work Count for interpreting the facts about volume of work in terms of their bearing on method. The training program includes conferences, with visual aids and practice on problems of his own department by each supervisor. A limited supply of pamphlets has been prepared for use in the federal service. Three of these describe the three techniques, one is a trainer's guide, and one describes the relation of top management to such a program in any of its agencies.—*H. F. Rothe* (Stevenson, Jordan & Harrison, Inc.).

2027. Fredenburgh, F. A. Reconversion of personnel. *Person. J.*, 1945, 23, 242-253.—A 6-point procedure is recommended for reconversion of personnel from wartime to postwar production: a personnel inventory or audit of present incumbents; adequate job analysis, description, and classification; refined selection techniques to measure skills, aptitudes, and interests for the purpose of matching the man and the job; orientation of the new employee; follow-up on the job; and personnel counseling dur-

ing encumbency.—*M. B. Mitchell* (Veterans Advisement Unit, CCNY).

2028. **Freeman, E.** A basis for testing and improving vision in industry. *J. consult. Psychol.*, 1945, 9, 35-44.—A program for the improvement of vision in industry requires a testing procedure of all workers in order to disclose those with deficient vision. A screening procedure which is speedy, economical, and convenient is necessary. At the present time it can be said that families of visual skills may be correlated with job families. A screening program may reveal data to be used by a job designer to improve the visual aspects of a job, thereby increasing efficiency.—*S. G. Dulsky* (Rochester, N. Y.).

2029. **Hubbell, H. G.** Intensive training of the higher grade defective. *Amer. J. ment. Def.*, 1944, 48, 385-391.—In the light of the great need for manpower, the writer raises the question of more adequate training of mental defectives to add to the sum total of the war effort and to their own self-sufficiency. Separate institutions for higher grade defectives are recommended. Although a longer period of training is required, "the mental defective is ideally equipped mentally and psychologically" to do many of the monotonous jobs of feeding a machine hour after hour. Greater use of tests of personality, aptitudes, and ability is suggested.—*S. Whiteside* (Cincinnati Public Schools).

2030. **Hull, A. W.** Selection and training of students for industrial research. *Science*, 1945, 101, 157-160.—The qualities needed for success in industrial research, in the order of their importance, are character, aptitude, attitude toward work, and knowledge.—*F. A. Mote* (Connecticut).

2031. **Judson, H. H., & Brown, J. M.** Occupational accident prevention. New York: Wiley, 1944. Pp. vi + 234.—\$2.75.

2032. **Kerr, D. J. A.** Motor driving tests. *Practitioner*, 1945, 154, 195-200.—Kerr reviews English requirements for motor licenses. An applicant's declaration as to his own fitness is of little value. Persons suffering from mental conditions do not usually consider themselves unfit to drive. Statistics regarding the responsibility of unfit drivers for accidents are fallacious, as drivers are not examined after accidents, except in cases of glaring disabilities. The average public-service driver shows a high standard of safe operating because of the psychophysical tests and thorough training which he has undergone. All applicants for driving private cars should be required to produce a certificate of satisfactory training from an approved instructor and to pass medical and psychological tests similar to those for drivers of public vehicles.—*M. E. Morse* (Baltimore, Md.).

2033. **Kingsley, L. V., & Hyde, R. M.** The health and occupational adequacy of the mentally deficient. *J. abnorm. soc. Psychol.*, 1945, 40, 37-46.—Selectees rejected from the Boston induction center for failure to meet mental and literacy standards were compared with normal selectees. The mental defectives were not physically inferior to the normals. They showed a higher incidence of psychopathic personality, criminality, and psychoneurosis, but not as

high as has been generally assumed. Chronic alcoholism is no more prevalent than among normals. 600 defectives were interviewed as to social and economic adjustment; 95% were employed at the time of induction, although they were unemployed more than normals during the depression. The defectives compare favorably with normals in ability to support themselves and others, and they appear to have a place in industry.—*C. M. Harsh* (Nebraska).

2034. **Kraines, S. H.** Industry's role in the readjustment of returning veterans. *Tex. Person. Rev.*, 1944, 3, 55-61.—The most frequent types of personality changes exhibited by veterans are discussed in some detail: loss of initiative and maturity, decrease in self-reliance, unrealistic plans for the future, excessive concern about salary rather than the nature of the work, restlessness, and irritability. Industry's role in dealing with these problems is to understand their nature and to plan a definite campaign to elevate the morale of returned veterans. This would include educational programs, care in selection of supervisors, machinery for dealing with complaints, and clinical services for handling domestic and personal problems.—*G. S. Speer* (Central YMCA College).

2035. **Leathers, Lord.** Road accidents. *Practitioner*, 1945, 154, 193-194.—In an introduction to a special number devoted to road accidents, Lord Leathers, Minister of War Transport, says that standards of traffic safety have deteriorated during the war and that the number of accidents in proportion to the number of vehicles in use has increased. A prominent reason for this is psychological in that, in the face of danger from the air, danger on the roads has been underrated. Yet road deaths during the war have equaled two thirds of the number resulting from air raids. The majority of the "killers" and the killed are in their early twenties. A new, strict, and comprehensive program is urgent.—*M. E. Morse* (Baltimore, Md.).

2036. **Mayo, E., & Lombard, G. F. F.** Teamwork and labor turnover in the aircraft industry of Southern California. *Publ. Grad. Sch. Bus. Adm. Harv. Univ.*, 1944, No. 32. Pp. vii + 30.—Nine aircraft companies co-operated to make possible this study of absenteeism and labor turnover. As the focus of the study was sharpened, the analysis settled upon progressively smaller groups, so that the most complete analysis reported was of a crew of 19 workers. Where workers were united into groups of high morale, there was little absenteeism or turnover. Those workers who did not belong to any "team" were the ones who had high absence and turnover records. Wise management can foster the natural formation of groups and develop ever larger groups through effective first-level leadership until the whole plant is one unified team. Defective management may hinder this development and may have many groups of conflicting aims or many isolated individuals. "But no remedies external to a specific work situation can change a fundamental defect of organization in it." Relations to other studies and implications for management are indicated.—*H. F. Rothe* (Stevenson, Jordan & Harrison, Inc.).

2037. Obermann, C. E. The War Department program of counseling for personnel being separated from the service. *Tex. Person. Rev.*, 1944, 3, 14-18.—The Army counseling program is intended to promote a psychology of self-help, providing the veteran with essential facts for making an intelligent decision. Techniques and materials used are briefly indicated.—G. S. Speer (Central YMCA College).

2038. Page, J. D., & Zbrank, L. J. A study of 500 consecutive enrollees in the U. S. Maritime Service Training Station at Avalon. *J. Psychol.*, 1945, 19, 311-316.—An attempt is made to summarize test, questionnaire, interview, and official record data on 500 consecutive Maritime Service enrollees admitted between March 21 and April 5, 1944, and ranging in CA from 17 to 48 with median of 20. The enrollees were above average in education, with higher incidence of marriage and divorce than for the total population. Data are given on happiness of childhood, psychiatric treatment, nail biting, enuresis, somnambulism, criminality, head injury, headaches, nomadism, and epilepsy. Motives for enrolling are discussed, and it is noted that medical disenrollment was only about one eighth as high as incidence of medical rejects at Army induction centers.—R. B. Ammons (Iowa).

2039. Rigeron, D. G. Industrial rehabilitation of the handicapped. *Industr. Med.*, 1945, 14, 173-177.

2040. Schoonover, F. S., Jr. Social and emotional readjustment of returning veterans. *Tex. Person. Rev.*, 1944, 3, 52-54.—It is concluded that the readjustment of the veteran will depend to a large extent upon the attitude of the nonveteran. Even though his physical and emotional condition is abnormal, the veteran should not be segregated but should be encouraged to resume prewar plans, follow a career, and assume individual responsibility.—G. S. Speer (Central YMCA College).

2041. Sheps, J. G. A psychiatric study of successful soldiers. *J. Amer. med. Ass.*, 1944, 126, 271-273.—In this study of 116 successful soldiers, an attempt is made to evaluate the psychiatric screening standards in the Royal Canadian Army Medical Corps. Findings are compared with those of studies of neurotic soldiers. The study was made because of the criticism rendered that the screening tests used are too severe; if this were true, some of the men who had seen battle duty (58 were in this group) and were left unaffected would have been screened out. The results show that the test is not too strict, and "errors are, if anything, in the direction of leniency."—D. Schneider (Wisconsin).

2042. Slocombe, C. S. Teams of workers. *Person. J.*, 1945, 23, 284-298.—This is a summary of *Teamwork and Labor Turnover in the Aircraft Industry of Southern California* (see 19: 2036).—M. B. Mitchell (Veterans Advisement Unit, CCNY).

2043. Standley, H. G. Wartime personnel problems in manufacturing. *Tex. Person. Rev.*, 1944, 3, 38-44.—This is a detailed study of why employees quit their jobs in a particular plant. Male and female, Negro and white, are compared. It is concluded that "women are more inclined to be satisfied with their jobs and less likely to leave to take other positions. If they quit, however, they are

more likely to leave without giving notice. . . . Female employees have more personal problems to iron out in order to stay on the job. . . ." Negroes are much more likely to leave without giving notice, but for the most part their leaving is due to factors outside the employment situation.—G. S. Speer (Central YMCA College).

2044. Turk, S. E. Education and training of personnel workers. *Tex. Person. Rev.*, 1944, 3, 78-79.—The author distinguishes between personnel clerks and personnel administrators. The education and training for the personnel administrators must include a liberal arts education with specialization in psychology, sociology, political science, administration, and business methods, followed by an internship in industry with continuing training.—G. S. Speer (Central YMCA College).

2045. Wall, W. D. Reading backwardness among men in the army. Part I. *Brit. J. educ. Psychol.*, 1945, 15, 28-40.—Test scores of intelligence and reading comprehension, plus educational histories, were obtained from 330 men engaged in general laboring duties. These were compared with similar data for 66 men employed in the semiskilled army trade of Storeman. Marked differences between the groups are found in average reading level and in the proportions of literate and illiterate men. The low reading ability of the unskilled group appears to result partly from the low level of general intelligence; but since there is a wide discrepancy between ability and achievement, other influences must be recognized. Those identified include curtailed schooling, prolonged absence, irregularity of attendance, and more than one change of school. Reading backwardness also correlates with inferior physical and emotional status.—R. C. Strassburger (St. Joseph's College for Women).

2046. Webbink, P. [Ed.] Postwar jobs for veterans. *Ann. Amer. Acad. polit. soc. Sci.*, 1945, 238, 1-239.

2047. Will, O. A., Jr. Certain psychiatric reactions in operators of antisubmarine sound gear; report of two cases. *Nav. med. Bull.*, Wash., 1945, 44, 746-748.—A large number of antisubmarine sound gear operators have complained of nervous tension attendant upon their 4-hour watches. Two cases of resulting schizophrenic episodes are reported. The auditory stimulus is of a high pitch, high intensity, and monotonous character. An alleviation of resulting psychological disturbance is suggested by shortening the duration of the watch, introducing rest periods, eliminating the less emotionally stable from duty, reducing the intensity of the stimulus, and lowering the pitch.—G. W. Knox (U. S. Naval Reserve).

[See also abstracts 1856, 1860, 1861, 1865, 1873, 1887, 1892, 1898, 1899, 1900, 1903, 1921, 1945, 1946, 1955, 1962, 1966, 1972, 2002, 2019, 2060, 2069.]

EDUCATIONAL PSYCHOLOGY

(Incl. Vocational Guidance)

2048. Burkart, K. H. An analysis of reading abilities. *J. educ. Res.*, 1945, 38, 430-439.—A survey of educational and psychological literatures

revealed a total of 214 abilities which reading specialists believed to be involved in the reading process. This list was submitted to five specialists who were asked to indicate which abilities could be eliminated in a study of the relative importance of abilities involved in reading. The list was in this way reduced to 89 items, and these were rated by 40 specialists as highly important, important, or unimportant. The list of abilities is given along with the rating of each. They are divided by the author into 6 general classes: observation, research abilities, vocabulary, aesthetic abilities, hygiene, and oral reading. The abilities considered most important are those in the field of observation: attention, comprehension, reproduction, and speed. Visual ability is important, but auditory ability is not. Other important abilities are two in vocabulary: the ability to acquire increased vocabulary and the ability to "unlock" words. Phonic abilities, hygienic abilities, and literary appreciation were rated relatively unimportant.—*M. Murphy* (Pennsylvania).

2049. **Burt, C.** The education of illiterate adults. *Brit. J. educ. Psychol.*, 1945, 15, 20-27.—Surveys indicate that the incidence of illiteracy among adults in England and Wales is sufficiently large to constitute a pressing educational problem. In terms of the criterion of educational age, it is indicated that by the age of 21, 1½-2% of the population are illiterate and 15-20% are semi-illiterate. The identifiable causes are for the most part similar to those responsible for educational retardation in children of school age. The redirection of interests on leaving school for work and the increasing emotional instability of the adolescent also contribute to the forgetting of formal school attainments by the dull. Remedies proposed include altered methods of instruction during the school years, continued education through youth organizations, and the institution of classes for illiterate adults. Broad practical principles to be followed in the training of such adults are indicated by recent experiments.—*R. C. Strassburger* (St. Joseph's College for Women).

2050. **Edgerton, H. A., & Britt, S. H.** Science talent in American youth. *Science*, 1945, 101, 247-248.—Annual surveys are being made of the social, physical, and professional development of all entrants—trip winners, honorable mentions and non-winners—in the first and second Science Talent Searches in order to obtain data tracing the growth of the thousands of young people interested in science as a career.—*F. A. Mote* (Connecticut).

2051. **Flack, W. S.** An experimental farming camp school. *Brit. J. educ. Psychol.*, 1945, 15, 41-54.—An experimental summer project embracing a group of 120 city boys and girls, ages 14 to 17, which combined a program of school and farm work, is outlined and evaluated.—*R. C. Strassburger* (St. Joseph's College for Women).

2052. **Good, C. V.** Doctors' dissertations under way in education, 1944-1945. *J. educ. Res.*, 1945, 38, 477-480.—This is a continuation of the list by the author in the preceding issue of the *Journal* (see 19:1794).—*M. Murphy* (Pennsylvania).

2053. **Gray, W. S.** Summary of reading investigations: July 1, 1943 to June 30, 1944. *J. educ.*

Res., 1945, 38, 401-429.—This annotated bibliography (54 titles) continues the series of annual summaries begun by the author in 1925.—*M. Murphy* (Pennsylvania).

2054. **Hart, O. M.** An education program for mentally defective children in an institution. *Amer. J. ment. Def.*, 1944, 48, 395-399.—As an experiment, the strict segregation of boys and girls in an institutional school situation was discontinued. After a year's trial, the faculty are in favor of a continuation of the boys and girls attending school and social functions together. These groups are carefully supervised. The academic program is organized into units. Firsthand experience with the subject matter is arranged whenever possible. A program of sensory training activities has been tried on a group of imbecile and high-grade idiot boys. Results are encouraging.—*S. Whiteside* (Cincinnati Public Schools).

2055. **Knower, F. H., Phillips, D., & Keoppel, F.** Studies in listening to informative speaking. *J. abnorm. soc. Psychol.*, 1945, 40, 82-88.—Three speeches on elementary physics were delivered to different groups of students by different methods: they were orally read, or directly spoken, or delivered with visual aids, in all cases by competent speakers. Forty-item objective tests show that immediate recall was significantly better for the speeches with visual aids but that there was less variation among methods on delayed recall. In a second project, 11 freshmen, varying widely in rated speaking ability, delivered the speeches to classes that were tested immediately and again after 4 weeks. Listeners' recall showed that good speakers were more effective than poor ones, that good speakers were more effective than good readers, but that silent reading was more effective than hearing a speech read.—*C. M. Harsh* (Nebraska).

2056. **McConnell, T. R., Freeman, F., & Prescott, D.** Adjusting educational psychology to war and postwar needs. *Yearb. nat. Soc. Coll. Teach. Educ.*, 1944, 29, 48-60.—Educational psychology, through its work in individual differences, has been an important factor in the development of personnel workers for the armed forces and industry. Postwar adjustment will demand even a greater role for the field. The importance of the psychology of individual differences, however, must not be allowed to overshadow the contributions of social psychology and developmental psychology in the understanding of the individual. Educational psychologists must provide to educators a synthesis of the progress of other sciences which contribute to the understanding of human development. The war emergency emphasized the need for understanding the development of attitudes and the building of morale. The psychology of attitude, motive, and morale will be fully as important in the period of postwar adjustment. Educational psychology must therefore explore these channels more thoroughly. Educational psychologists must aid in the re-education of Germany and other totalitarian countries by developing a program of re-education based on the principles of human learning. Equally important for the educational psychologists is the need for further work toward the improvement of the interrelation-

ships between the individual and the group in the pursuit of a free and well-integrated society.—*R. D. Weitz* (Jersey City).

2057. McNamara, W. J., & Weitzman, E. The effect of choice placement on the difficulty of multiple-choice questions. *J. educ. Psychol.*, 1945, 36, 103-113.—The author analyzed the answers to 229,383 answers on 4-choice questions and 364,705 answers on 5-choice questions and calculated the per cent of correct choices when the right answer appeared in each of the possible positions of each type of series. Progressive difficulty is noted from the first to the third position in 4-choice questions and from the second to the fourth in 5-choice questions. In both types, the difficulty of first and last choice is about the same; but whereas these are relatively easy positions in 4-choice questions, they are harder than the second and third in the longer series. Since the differences noted are slight, the factor of position is important, in practice, only when dealing with many questions and a large number of subjects.—*E. B. Mallory* (Wellesley).

2058. Pinsent, A. The psychology of teaching and teacher training: a review in relation to the McNair proposals. *Brit. J. educ. Psychol.*, 1945, 15, 5-19.—The effect of the recommendations of the McNair Committee is to displace the main emphasis in the preparation of teachers from academic or technical specialization to professional knowledge and skill. It is, therefore, desirable to determine what should be included in a common basic professional curriculum and training and what methods of selection and guidance of prospective teachers might prove most effective. Since the essential objective in teaching is the optimum educational development of each individual pupil and since the essential process in teaching is the reorganization and adaptation of all relevant experience (including the teacher's own knowledge and skills) to accord with the pupil's optimum development, the function of professional training is to maximize the teacher's power of intellectual reorganization and adaptation. Training to insure transfer and adaptability must provide practice in analyzing and abstracting the essentials of a teaching situation and its related method. Understanding the pupil through significant behavior signs is essential to efficient teaching.—*R. C. Strassburger* (St. Joseph's College for Women).

2059. Raven, J. C., & Walshaw, J. B. Vocabulary tests. *Brit. J. med. Psychol.*, 1944, 20, 185-194.—The Mill Hill Vocabulary Scale is reproduced. It consists of two sets of 44 words each. This is considered to be a complement to the test known as Progressive Matrices. How the words were selected is described, along with preliminary norms.—*E. R. Hilgard* (Stanford).

2060. Schloerb, L. J. [Dir.] Today's choice of tomorrow's job. *Self-Apprais. Careers occup. Ser. Bd Educ. Chicago*, 1944, No. 1. Pp. 35.

2061. Strang, R. Variability in reading scores on a given level of intelligence test scores. *J. educ. Res.*, 1945, 38, 440-446.—The California Test of Mental Maturity, the Thorndike-McCall Test, the Gates Silent Reading Test, and a new type of test, designed by Gans to measure the ability to apply

what is read to practical problems, were given to 417 elementary school pupils, 8 to 15 years of age. Reading comprehension was found to have a higher correlation with mental age based on language test items than with nonlanguage test mental age. Language mental age was related closely to scores on the Thorndike-McCall and the Gates but not to scores on the Gans Test. Nevertheless the scatter in reading scores on a given chronological and mental age is wide, often extending over the entire range of the test. The reasons for this variability can be determined only by clinical studies.—*M. Murphy* (Pennsylvania).

2062. Wallin, J. E. W. Report of the Division of Special Education and Mental Hygiene for the school year 1943-1944, Delaware State Board of Education. I. Activities of the Director. *Rep. Div. spec. Educ. ment. Hyg., Del.*, 1944, Part 12. Pp. 224-233. Among the activities reported are the following: survey of physically and mentally handicapped children; psychological and educational examinations; audiometric examinations; recommendations regarding the placement of children psychologically examined; wartime truancy and delinquency among special-class retardates; illustrative case histories; and new services for speech defectives, the hard of hearing, and the homebound.—*S. Whiteside* (Cincinnati Public Schools).

2063. Wightwick, M. I. Vocational interest patterns. *Teach. Coll. Rec.*, 1945, 49, 460-461.—Abstract.

2064. Yoakam, G. A. Essential relationships between reading and the subject fields or areas of the curriculum. *J. educ. Res.*, 1945, 38, 462-469.—Basic training in reading does not prepare the pupil for effective reading in all types of situations. Teachers in all fields of the curriculum must therefore understand the reading problems and needs of pupils in these fields and be prepared to meet them. Each curriculum field involves special reading problems, such as acquisition of a technical vocabulary, development of ability to interpret maps, graphs, tables, formulae, etc. Every teacher must teach reading until pupils read effectively in all situations where reading is required.—*M. Murphy* (Pennsylvania).

[See also abstracts 1893, 1910, 1914, 1996, 2044, 2045.]

MENTAL TESTS

2065. Escalona, S. K., & Rapaport, D. The psychological testing of children: intelligence and emotional adjustment. *Bull. Menninger Clin.*, 1944, 8, 205-210.—Psychological testing is moving beyond the measurement of intelligence to the problems of understanding personality structure and of diagnosing types of adjustment and maladjustment. Such testing is most useful when it is a part of a broader program of clinical investigation. The kinds of situations in which psychological tests can make a contribution are briefly described, and the nature of their possible contributions is summarized. Testing "meets a variety of needs in medical, psychiatric, and educational practice. By means of an analysis of the different degrees of retardation and

acceleration of development, and of the specific nature of atypical forms of mental functioning, testing may help to differentiate between the manifestations of congenital mental deficiency, of specific disabilities, and of various types of maladjustment."—*W. A. Varvel* (Texas A. & M.).

2066. Halstead, H., & Chase, V. E. Review of verbal intelligence scale on military neurotic patients. *Brit. J. med. Psychol.*, 1944, 20, 195-201.—Records of the Cattell Verbal Intelligence Scale II A, as given to 500 male neurotic patients, were analyzed. The short 22-minute form of the test correlated $+0.88$ with the full scale. "Internal" percentiles are given for each of the 6 subtests. Factor analysis shows a high general factor.—*E. R. Hilgard* (Stanford).

2067. Penrose, L. S. An economical method of presenting matrix intelligence tests. *Brit. J. med. Psychol.*, 1944, 20, 144-146.—A new series termed the Pattern Perception Test is described. It consists of 64 problems or items. Four of 5 figures in a row form a pattern or matrix. The subject is instructed to strike out the extra one. The test requires 30 minutes of working time.—*E. R. Hilgard* (Stanford).

2068. Thurstone, L. L. Testing intelligence and aptitudes. *Hygeia, Chicago*, 1945, 23, 32-36; 50; 52; 54.—A single score such as the IQ or other index of intelligence is inadequate for the purpose of describing an individual's mental endowment. A profile score indicating the level attained in the various primary mental functions would offer a more significant picture of endowment and would be of far more use in counseling young people. The problem of determining just what are the fundamental human abilities and traits has been attacked by the statistical method of multiple factor analysis. The primary mental functions so far isolated by this method include Verbal Comprehension (V), Word Fluency (W), Number Facility (N), Memory (M), Visualizing or Space Thinking (S), Perceptual Speed (P), Induction (I), Speed of Judgment (J), and others, but much further work must be done to complete the list. Selected items from tests of several functions illustrate the technique used in measuring them. Profile scores made by persons in special fields of work are presented to show certain patterns of ability typical in particular vocations.—*E. B. Mallory* (Wellesley).

[See also abstracts 1996, 2061.]

CHILDHOOD AND ADOLESCENCE

2069. Baruch, D. W. When the need for war-time services for children is past—what of the future? *J. consult. Psychol.*, 1945, 9, 45-57.—A review of wartime child care services reveals many individual, familial, and national benefits. A questionnaire survey indicates that continuance of nursery schools is being looked forward to in the postwar period by a majority of persons in key positions; continuance of extended care for the school-age child is anticipated less extensively. Child care centers have "shown themselves worthy of continuing to serve children and parents in the postwar world, not as facilities set apart and outside of what is commonly done for children and parents,

but as a well-integrated and cohesive part of what all the schools of the nation must eventually undertake."—*S. G. Dulsky* (Rochester, N. Y.).

2070. Craig, R. N. Report on the work of the Exeter Child Guidance Clinic. In *Radsinowicz, L., & Turner, J. W. C., Mental abnormality and crime*. London: Macmillan, Ltd, 1944. Pp. 300-307.—The author gives a brief history of the development of the clinic and the relationship between it and the schools, the courts, and other community resources and services. He emphasizes the need for careful selection of clinic personnel. Routine examination of all children brought before the juvenile court should be made, with special attention to postencephalitic and hypoglycemic cases.—*M. R. Jones* (U. S. Naval Reserve).

2071. Gesell, A. The role of developmental diagnosis in clinical medicine. *N. Y. St. J. Med.*, 1944, 44, 2599-2603.—Development can be fully appraised only in terms of maturity of the central nervous system as displayed in behavior patterns. Gesell describes, with illustrations, the procedures used in the Yale Developmental Clinic and refers to the film *Developmental Diagnosis*. The interest lies, not in success or failure as such or in psychomotor ratings, but in the patterns evoked and the judicious weighing of numerous indicators, taking into account all the attendant and historical factors. The IQ has been seriously misused in school-age children, and in infants it is all but meaningless. There are two major fields for developmental diagnosis: (1) routine, in child health supervision under various conditions; and (2) referral, for intensive diagnosis, follow-up, and parental guidance in all cases of maldevelopment.—*M. E. Morse* (Baltimore, Md.).

2072. Ghosh, R. Anxieties in children. *Indian J. Pediat.*, 1943, 10, 63-69.—[Abstracted review; original not seen.] Nursing infants are capable of experiencing and demonstrating anxiety. They are sensitive to the kinesthetic and touch sensations aroused by the mother's handling and thus form an impression as to whether they are loved or not. If feeding is unsatisfactory, the child reacts to the mother's anxiety and the mother to the child's. Any form of teasing, even as love-play, destroys a child's faith in his elders; but the teasing game is bilateral, and a child can learn to manage his parents through their anxieties.—*M. E. Morse* (Baltimore, Md.).

2073. Guildler, R. P., & Schall, L. A. Rehabilitation of the child who is handicapped by deafness. *Laryngoscope, St. Louis*, 1944, 54, 511-530.—The program of aural rehabilitation developed at the Massachusetts Eye and Ear Infirmary studies the individual child from the standpoint of general health, mental development, school achievement, special disabilities in hearing or speech, and social adjustment to his handicaps. The present paper is concerned with these factors in relation to the recommendation of hearing aids for children with conduction deafness, with partial high-tone deafness, or with more marked nerve deafness. The importance of the earliest possible rehabilitation is emphasized by presenting case histories of successful development and school placement following early use of

hearing aids for preschool children.—A. C. Hoffman (Tufts).

2074. Henry, C. E. **Electroencephalograms of normal children.** *Monogr. Soc. Res. Child Developm.*, 1944, 9, No. 3. Pp. xi + 71.—This report presents an extensive analysis and summary of electroencephalographic data accumulated during the period 1936 to 1943 at the Brush Foundation, as part of a study of growth and development of normal children. The results are based on EEG examinations of 1,473 children ranging in age from 3 months to 19 years. Both longitudinal and cross-sectional analyses were made. Normative standards for alpha frequency and percent-time-delta activity are provided. Correlations between various pairs of EEG variables are presented. No significant relationships between alpha frequency or percent-time-delta and skeletal maturity or IQ were found. These results are discussed in relation to other studies. Extensive treatment is given the presence of slow or so-called 'abnormal' activity in the records of 'normal' children. Sample records of 'abnormality' in the records from normal children are shown and discussed in relation to the histories. Caution is urged in the interpretation of 'abnormal' EEG's in the case of otherwise normal children. The report includes 7 tables, 13 figures, and a bibliography of 71 titles.—D. B. Lindsley (Boca Raton Field, Fla.).

2075. Hughes, M. **The training of children in road sense.** *Practitioner*, 1945, 154, 240-247.—Training involves, not obedience to rules, but the development of a general attitude toward safety and controlled and considerate behavior. Any plan must rest on a knowledge of the dynamics of the child's mind and be backed up by vigorous propaganda and adequate protection. Methods which appeal only to adult disapproval or fear regarding personal safety stimulate rebellion against authority and a display of daring. Successful training must be constructive, utilizing the play instinct and the pleasure of excelling in one's tasks. All available sources of propaganda should be used. A talk by the traffic policeman is particularly impressive. The greater number of casualties are not connected with school but involve preschool children, older children playing on the streets, or introverted and emotionally maladjusted children. It is doubtful, however, whether the best training can protect children absorbed in play, especially in congested areas with fast-moving traffic. Future improvement depends largely on better town planning and removal of heavy traffic from residential areas.—M. E. Morse (Baltimore, Md.).

2076. Hughson, W., & Thompson, E. **Audiometry in the diagnosis and treatment of deafness in children.** *Ann. Otol., etc., St Louis*, 1944, 53, 480-492.—Reasonably accurate audiograms can be made of children two years of age and older. For preschool children, the 'noise field' or 'free field' method is suggested, even though young children show no fixed pattern of response to the tonal stimulus. For primary school children, speech reception tests are probably more accurate measures of hearing than audiometer tests. About 3% of the children in public schools are handicapped by a hearing loss.

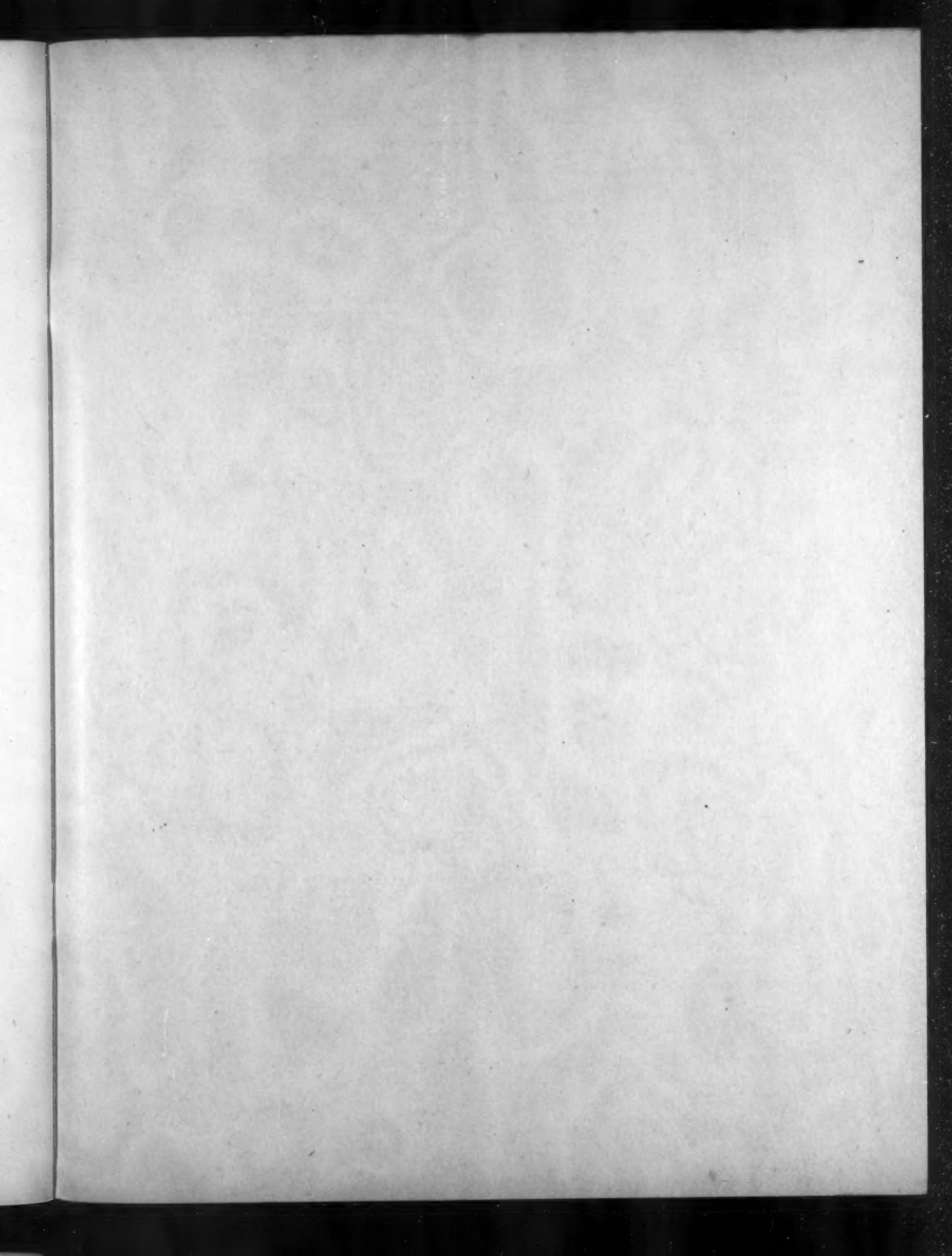
Audiometric tests of hearing should be made during and after any type of treatment (several of which are described).—A. C. Hoffman (Tufts).

2077. McHugh, G. **Autistic thinking as a "transitory phenomenon of childhood."** *Child Developm.*, 1944, 15, 89-98.—Seventy children, ranging in CA from 6 to 12 years, with 10 at each age level, were given an autistic fallacies test devised by T. V. Moore. The subjects differed somewhat from Moore's subjects in that half of each age level group were slightly superior in intellectual status to his subjects and the remaining half were definitely superior. The results obtained support the following conclusions: there is no essential difference between the development of the ability to detect and reject autistic fallacies and the development of the ability to reason logically or to detect logical fallacies; there is a close relationship between the ability to detect autistic fallacies and mental age; and there is no evidence to support a conclusion that "autistic reasoning is a transitory phenomenon of childhood."—L. Long (College of the City of New York).

2078. Seipt, I. S. [Dir.] **Review of psychiatric progress as related to exceptional children.** *Proc. Inst. Child Res. Clin. Woods Schs*, 1944, 11. Pp. 64.—This "is an attempt to bring together some of the recent thinking on this important topic." The following are the topics presented and discussed: responsibility of the pediatrician to the exceptional child (C. W. Wyckoff); extra-pyramidal mechanisms in the growing years (L. J. Karnosh); psychiatric evaluation of the hyperkinetic child (W. F. Schneider); psychological factors in the treatment and training of the exceptional child (H. Schumacher); value and limitations of endocrine therapy in the exceptional child (E. P. McCullagh); and the clinical value of electroencephalography in children (E. M. Zucker). The necessity for developing better interfield relationships is stressed by Schneider: "The exceptional child presents a challenge to the diagnostic acumen of every physician, psychologist, orthopsychiatrist and educator who must contribute toward the satisfactory home and school adjustment of this child."—S. B. Sarason (Southbury Training School, Conn.).

2079. Zeligs, R. **Social factors annoying to children.** *J. appl. Psychol.*, 1945, 29, 75-82.—Sixth-grade boys and girls of two suburban public schools of Cincinnati were asked to list things which annoyed and irritated them. These items were then classified into 12 categories which ranged from social relationships to environmental conditions. This organized material was presented to the same 285 children during the following year, with instructions to encircle the member on the provided rating scale which expressed their feeling toward each item (possible rating extended from *like* to *hate much*). Analysis of the data indicated that items receiving the highest *hate much* rating by boys have to do with injustice, war, sarcasm, bullying, and laughing when others get hurt; the girls found the witnessing of pain and sickness, and social relationships that lower their personal status the most disliked occurrences.—H. Hill (Indiana).

[See also abstracts 1914, 1981, 1989, 2065.]



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